BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XCVII.] LONDON: SATURDAY, NOVEMBER 6, 1858. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

SALOP INFIRMARY.

APPLICATION OF POTASSA FUSA TO VARICOSE VEINS OF LEG: PURULENT PHLEBITIS: SECONDARY PLEURO-PNEUMONIA AND PULMONARY ABSCESSES: DEATH.

By J. R. HUMPHREYS, Esq., Surgeon to the Infirmary.

THOMAS ROBERTS, aged 31, a healthy robust labourer, was admitted into the Salop Infirmary, suffering from a varicose ulcer on his right leg. He had been a patient of the Infirmary before, for the same complaint; and, as he was a man in the prime of life, with a probability of being troubled with the veins, which were much dilated, I advised him to have them destroyed, to which he readily assented. On September 10th, I applied six points of potash paste—viz., three parts quick lime, and two parts potassa fusa—below the knee. They were all of about half the size of a split pea, and were applied over a hole cut in several layers of adhesive plaster, and covered with another layer. They were directed to be left on for thirty minutes; but, owing to a misunderstanding of the dresser, they were not removed for forty minutes. A poultice was applied afterwards to the leg: the sloughs separated much as usual. On the fourteenth day—some of the sloughs not being detached—he felt a soreness about the leg, and a slight shivering, but so slight that he did not mention it.

On the next day (fifteenth) he was seized with a severe and well marked rigor. There was no doubt that phlebitis had set in, if not absorption of pus into the system. He was ordered two grains of calomel and a grain of opium every fourth hour, nourishing diet, beef-tea, etc. Fomentations and poultices were applied to the leg. On the sixteenth day, the rigor recurred; and also on the seventeenth. On the evening of this day, he was seized with a violent cutting pain in the right side, which ushered in an attack of pleuropneumonia. This was treated with the usual remedies, leeches to the side freely, continuing the calomel and opium, and allowing wine, beef-tea, etc. Counterirritation, commencing with turpentine epithems, followed by blisters to the back and front of the chest, was applied. The pulse during the whole of the time was very quick, ranging from 120 to 150 in a minute.

It is useless to give the daily notes of the case: suffice it to state that, after the acute symptoms of the inflammatory attack had subsided in the chest, typhoid fever set in, under which he died on the thirty-sixth day after the application of the caustic.

POST MORTEM EXAMINATION. On opening the chest, the right pleura was found almost full of a sero-purulent fluid; the membrane itself was converted into a thick leather-like layer. The lung of that side was compressed, and, when cut into, found to be partially solidified, from the effect of the inflammation and pressure of the fluid in the pleura: it was studded with abscesses of about the size of a walnut. The left lung was in an earlier stage of inflammation, and also studded with like abscesses. On examining the saphenous vein of the leg, it was found full of pus from the ankle up to four inches above the knee, where a clot was found, of about two inches in length, above which the vein was healthy. The other organs of the body were healthy.

ST. MARY'S HOSPITAL.

I. TWO CASES OF VESICO-VAGINAL FISTULA, SUCCESSFULLY OPERATED UPON.

Under the care of I. B. BROWN, ESQ.

WE referred last week to Dr. Bozemann's method of operating for vesico-vaginal fistula, and expressed our opinion that notwithstanding the incomplete success which had attended that gentleman's own operations in England, his method had proved so successful in the hands of others, as to have entirely vindicated the reputation which has been attached to it. In corroboration of this assertion, we quote two cases recently operated upon by Mr. Baker Brown, the former of which we had the opportunity of seeing when she was admitted for the second time, on account of the injury to the urethra, and can testify to the soundness of the cicatrix, and the perfectness of the cure of the principal ailment. The complication proceeding from the state of the urethra is also an interesting feature in the case. The woman appeared to have derived much advantage from the operation, although she was not entirely cured. For the notes of these cases, which are extracted from Mr. Brown's case-book, we are indebted to Mr. G. L. Rogers, Mr. Brown's house-surgeon. Other cases of the same nature are at present under Mr. Brown's treatment, so that we shall shortly in all probability have an opportunity of recurring to the subject.

CASE I. Margaret Dancer, aged 26, was admitted May 15th, 1858. In March last, she was in labour with her first child, and was delivered naturally of a still-born male child. She stated that she was allowed to remain in hard labour three days and nights. The urine was drawn off by the catheter for two days after delivery, as she could not void it; after that time, it dribbled away. On examination, there was found an opening, about one inch long, situated at the neck of the bladder.

May 17th. An ounce of castor oil was prescribed; and she was ordered to have ordinary diet and porter.

May 19th. The oil was repeated. She was taken into the operating theatre, and Mr. Brown operated on the fistulous opening in the usual manner by means of three silver wires, with shots and buttons. During the operation, urine mixed with blood oozed away in great quantities through the opening. Two grains of opium were given immediately, and a grain every four hours. A catheter was placed in the bladder, and allowed to remain. The patient was ordered to have simple diet, beef-jelly, and four ounces of wine.

May 20th. She had no sleep, and complained of pain. She was very sick the previous evening, and in the night from chloroform. Soda water was given.

May 21st. It was reported that a small quantity of urine escaped.

May 22nd. The "sister" said that when she passed the catheter this morning, about half a pint of urine was drawn off. The same occurred on the 24th.

May 29th. Mr. Brown removed the shots, button, and silver wire.

June 1st. The patient complained of pain.

June 4th. She said she had hæmorrhoids; but on examination, none could be found. The uterus, however, was very large, and pressed on the rectum. She was much better.

June 7th. She sat up a short time yesterday and again this morning.

June 8th. On examination, Mr. Brown found that the whole of the parts were healed, except a space large enough for the end of an ordinary director.

June 13th. She stated that her urine came away from her in greater quantity than it ever did; that she had continual dribbling, and could not retain any. The bowels were open.

June 16th. After the usual preparatory treatment, she was again operated on by Mr. Brown, by means of three silver sutures, with shots and buttons; and the parts were brought well into apposition. A catheter was introduced and retained. The patient was put on the usual opium treatment followed by Mr. Brown in operative cases.

June 18th. She was doing well; there was no escape of urine. She had not suffered much from sickness.

June 22nd. No urine escaped; she retained it, and could pass half a pint voluntarily.

June 26th. The button and silver wires were removed in the presence of Drs. Bozemann and Hayward. The wound had entirely healed; and no urine could be made to pass through the parts. Since the last report (June 22nd), a slight escape had been occasionally observed by the sister, which was supposed to have passed down after the catheter, a slight rupture by the orifice of the urethra justifying this opinion. She could retain as much as half a pint without any escape. She was allowed to lie outside the bed.

June 29th. She had observed the last two days, during which she had sat up, that when in the erect posture there was an escape of urine (rather free, but not by any means so much as formerly). In the horizontal posture, there was no escape. The parts were again examined, and found in the same state as on the 26th. Caustic was applied to the interior of the orifice. She was ordered to take twenty minims of tincture of sesquichloride of iron in an ounce of infusion of quassia three times a day.

July 1st. The medicine was repeated as on June 29th.

July 4th. She was no better.

July 6th. The urine continued to escape as on June 29th. The patient was subjected to a rigid examination by Mr. Brown and Dr. Bozemann. The bladder was injected with water, but without any escape from the site of the fistula. This was considered sufficient evidence of the fistula being cured; and the incontinence of urine in the erect posture was referred to the rupture by the orifice of the urethra, before noted. Mr. Brown advised her to go into the country to regain health, prior to submitting to an operation for the ruptured urethra; and she was accordingly discharged.

On September 27th, she was admitted for urethral fistula. Since her return to the country in July, she had remained in the same state as when discharged from the hospital; no improvement had taken place, nor had the symptoms increased.

On examination, the urethra was found in the same condition as when she was discharged. From the meatus backwards there was a rupture for about an inch; the cicatrix in the situation of the old fistula was firm and complete; and there was no escape of urine.

September 29th. After the usual purgatives had been given, she was operated on under the influence of chloroform. The edges of the rupture were pared; and three silver wires were introduced, and fastened by means of shots on the leaden button, as before. The parts were well brought together. The form of the button differed from those usually employed; it retained the same concave centre, but the fore part was hollowed out (a notch made) for the lodgment of the catheter. This part of the button projected beyond the meatus. She was put to bed; the catheter was introduced; and two grains of opium were given immediately, one grain every four hours.

September 30th. She was doing well. The catheter was removed; and directions were given for the urine to be drawn off at stated intervals.

October 2nd. The portion of lint was removed from the vagina, as it appeared to excite irritation. The orifice of the urethra shewed some irritable sensitive granulations, thus accounting for the slight bloody discharge that had been present occasionally during the last few days. She was ordered to wear a gum catheter.

October 7th. The plate and sutures were removed to-day. There appeared to be still nearly an inch of the urethra deficient. The part operated on had healed, and the orifice by the urethra was granulating well. She had suffered less distress since wearing the gum elastic catheter. She was now allowed to pass her urine of her own free will.

CASE II. Jane Jones, aged 46, married, having had ten children, was admitted on October 10th, 1858. About ten years ago, she was confined with her tenth child. She was thirty-six hours in labour, and was ultimately delivered by instruments. Five days afterwards, she strained very much whilst attempting to pass urine; and in a short time, while lying in bed, she fancied she was flooding, from a great quantity of urine escaping *per vaginam*. From that time, she had never been able to retain her urine when upright, nor, at first, when even lying down. All her labours had been very prolonged; instruments were used on four occasions.

October 13th. On examination, the opening was found to run horizontally immediately anterior to the os uteri. The usual operation was performed; but in this case there was a little more difficulty experienced, as the silver sutures, six in number, implicated the os. The proceeding occupied one hour. A catheter was introduced; and two grains of opium and four ounces of brandy were ordered.

October 14th. The pill was repeated every four hours. She slept pretty well; but was rather sick this morning.

October 19th. She had gone on well since last reports. The catheter was removed this morning; no urine escaped. The urine was ordered to be drawn off every two hours during the day, and the catheter to be kept in during the night.

October 22nd. There was still no escape of urine.

II. PHRENIC HERNIA.

Under the care of JAMES ALDERSON, M.D.

[*From Notes by* A. G. LAWRENCE, ESQ., *House-Surgeon.*]

Thomas A., aged 20, was admitted under Dr. Alderson's care on July 29th, with symptoms of pneumothorax and diaphragmatic hernia. He had enjoyed good health till two years ago, when he fell on the ice, and injured his left side. Since that period he has never felt well. On the evening of the 28th, his foot slipped while walking in his own house; and, in trying to save himself from falling, he gave himself a severe twist, when he felt something snap at the lower ribs on the left side, followed by great pain, to such an extent that he could hardly breathe for some minutes.

On examination, the front of the left chest appeared very prominent, the intercostal spaces bulging. The heart was displaced to the right, and could be felt pulsating from the fifth to the seventh intercostal spaces. The breathing was not urgent. The right side moved more than naturally; and there was movement on the left side, particularly at the apex of the thorax, although it did not move nearly so much as the right. The lips appeared natural; the countenance was anxious. He complained of slight pain beneath the lower ribs on the left side, but no pain anywhere else. His pulse was small, weak, 105; skin rather cold. On percussing the left side in front, the sound was found abnormally resonant, and of an empty-bottle character, but slightly duller at the apex, though remarkably resonant as compared with the other side, which was quite healthy. Behind, the percussion was decidedly duller than on the right side, which was healthily resonant. On auscultation in front over the left chest, the heart sounds were heard quite plainly; but there was a total absence of the breath sounds, except in the first intercostal space, where a coarse vesicular murmur could be plainly heard. On the right side, the breathing was puerile: it was resonant to percussion everywhere, except in the space occupied by the heart. The sounds of the latter were healthy. He could lie on the back or left side; lying on the right side immediately occasioned dyspnœa. He went on without any prominent symptoms till 9 A.M., when he vomited (for the first time) some undigested food. The sickness increased during the night, in spite of hydrocyanic acid; and in the morning he was found to be vomiting, every ten minutes, thick ropy mucus. His pulse was much weaker; his countenance was anxious and pale; he was very thirsty. A blister was ordered to the epigastrium, and he was directed to take iced brandy constantly. This produced a little temporary alleviation of the symptoms: the vomiting, however, still continued. He took a good deal of the brandy, but brought it up immediately. He drank an immense quantity of water. In the afternoon, he complained of a good deal of pain beneath the ribs. At 7 P.M. he got out of bed, though he had been ordered not to do so. As the nurse was about to put him into bed again, he said, "Catch me, I am going"; and fell into her arms. He was found in a cold clammy sweat, with no pulse at all. The dyspnœa was not urgent. He took a little brandy; but, as soon as he took it, he brought it up again. He had much greater difficulty in swallowing than he had had, and could only take half a spoonful at a time. This did not seem to go farther than the lower part of the œsophagus, and was then rejected. A large quantity of thick black fluid, like digested blood, was now brought up. He recovered consciousness, and said he had had a sharpish attack, and that his stomach felt as if full of water. There was still no pulse; he looked more haggard. He then rallied a little in strength, but still wandered a good deal. The pulse was now

hardly perceptible. He continued to bring up the thick black fluid till half-past nine, and died thirty-two hours after admission, and about fifty-one hours after the accident.

On *post mortem* examination, the heart was found lying in the position above indicated: it retained its natural direction. The pericardium was much injected, and its layers were slightly adherent by recent lymph. The right lung was a little pressed upon by the heart; it was everywhere crepitant, but excessively engorged. There was a little fluid in the pleura. The left pleura contained at least six pints of black and rather thick fluid, in which pieces of food were floating. The lung was lying at the upper and back part of the thorax: it was quite carnified and free from air, except just along the margin. At the lower part of the chest, protruding through an opening in the diaphragm, was found the whole of the stomach, with the great omentum, the larger portion (from ten to twelve inches) of the transverse colon, and the spleen. The stomach was collapsed, nearly empty, and lying with its greater curvature turned upwards; the œsophagus forming a very abrupt curve, with its convexity downwards. At the posterior surface, near the cardiac extremity, the coats of the stomach were much thinned, and had given way at one point, forming an opening about the size of a half-crown. On opening the stomach, it was found to contain some dark semifluid material, similar to that in the cavity of the pleura, which was partially digested blood; this would seem to have escaped from a large vessel which could be traced to the ulceration, and seemed to have been opened by it. The opening in the diaphragm was in the left portion of the tendon, near its posterior part; it was large enough readily to admit the hand; its margins were rounded and thickened; and the serous covering of the fissure seemed continuous with the pleura on the one side, and the peritoneum on the other: it was quite perfect, except at the left border, which appeared to have been lately torn to the extent of an inch. This opening in the diaphragm commenced about an inch to the left of the œsophageal opening. The peritoneum was everywhere exceedingly pale, and contained a fluid precisely the same as that in the pleura, to the amount of two or three pints. There were old adhesions at the upper part, from old peritonitis.

Remarks. The interest of this case has induced us to publish, by Mr. Lawrence's permission, a slightly abridged edition of his notes, although they have recently appeared in another journal. The peculiarity of the case, and one which distinguishes it from any other of the kind which we can remember, consists in the very clear history of a previous accident, joined with the *post mortem* appearances of an old rupture of the diaphragm, which had been extended by a more recent laceration. It may be used, therefore, to show how little disturbance to the vital functions may ensue upon this injury, when uncomplicated; and such cases may be fitly associated with those others (such as the one published at p. 285) in which no injury has been known to have been sustained, but where a large portion of the abdominal viscera have been found to have passed through the diaphragm, and to be lying in the thorax. These "congenital" cases (as they are called, though it is questionable whether some of them, at any rate, have not been the result of accident) are known to be accompanied by no symptom whatever, either of dyspnœa from the incompleteness of the diaphragm, or of dysphagia from the altered position of the stomach; and there seems little reason to doubt that in this patient, between the first and second accident, the case was of a similar nature.

Society for Relief of Widows and Orphans of Medical Men. At the half-yearly general meeting of the members of this Society, held on October 13th, the following gentlemen were elected officers and directors for the ensuing year:—Officers elected: *President*—T. A. Stone, Esq. *Vice-Presidents*—Martin Ware, Esq.; E. A. Brande, Esq.; J. Nussey, Esq.; Sir B. C. Brodie, Bt., F.R.S.; P. M. Latham, M.D.; John Bacot, Esq.; Thomas Turner, M.D.; D. H. Walne, Esq.; A. J. Sutherland, M.D., F.R.S.; E. Tegart, Esq.; E. Stanley, Esq., F.R.S.; G. Burrows, M.D., F.R.S. *Treasurers*—J. Miles, Esq.; J. Clarke, M.D. (Acting); J. T. Ware, Esq. *Directors elected*—G. J. Squibb, Esq.; H. Combe, Esq.; A. M. Randall, Esq.; H. Jeaffreson, M.D.; J. Hilton, Esq.; H. Oldham, M.D.; R. S. Eyles, Esq.; H. Sterry, Esq.; G. Hamilton Roe, M.D.; H. K. Owen, Esq.; H. Lee, Esq.; R. B. Todd, M.D., F.R.S.; Robert Nairne, M.D.; W. Cathrow, Esq.; E. Barker, Esq.; J. Paget, Esq., F.R.S.; J. Adams, Esq.; F. J. Farre, M.D.; A. B. Barnes, Esq.; E. Dew, M.D.; J. Love, Esq.; H. A. Pitman, M.D.; C. Collambell, Esq.; S. Stedman, Esq.

Original Communications.

EXPERIENCE IN MEDICINE:

BEING THE INTRODUCTORY ADDRESS DELIVERED BEFORE THE LIVERPOOL MEDICAL SOCIETY, OCTOBER 7TH, 1858.

By Thomas Inman, M.D.

Gentlemen,—It devolves upon me, as one of the vice-presidents of the Medical Society, to deliver the opening address upon this occasion. Of course, I should have been very glad if the duty had fallen upon one of my colleagues, and I had been able to enjoy the ease and pleasure of a listener, rather than perform the more onerous and somewhat nervous task of author. However, as I accepted with satisfaction the honour of office, it becomes me to discharge this part of its duties to the best of my ability. The main difficulty to be overcome is the selection of an appropriate subject for discourse. Upon ordinary topics, you are all equally informed with myself; and the interest of extraordinary subjects is small, unless they have practical bearings. If we were to content ourselves with a simple retrospect of what has recently been done, we should have little difficulty in framing an elaborate mosaic out of Brown-Séquard's new views respecting the nervous system, and the influence of Claude Bernard's experiments upon our knowledge of diabetes. All honour to the Frenchmen for their untiring energy, perseverance, and acumen! We prefer, however, to take as the subject of our paper one of individual interest; and to found our discourse on the single word *experience*.

There is probably no set of proverbs so constantly before our minds as that founded on this word. We have the short "*Experientia docet*" of our Latin *Delectus*, the "Experience makes fools wise", the "Learn wisdom by experience", of our maturer years. The ideas intended to be conveyed are, that we learn more by seeing and hearing than we do by reading and thinking; that we necessarily grow wiser as we grow older: and therefore, the maturer the age of an individual, the more mature must be his knowledge and his judgment.

Notwithstanding these proverbs and the concentrated wisdom they are supposed to infold, it is strange and somewhat interesting to observe how continually they are ignored, and how completely the practice belies the theory that men uphold. According to theory, the world ought to be growing wiser as it is getting older; the knowledge possessed by our forefathers ought to have been steadily advancing and increasing, like a descending avalanche or a rolling snowball. Our own profession, now three thousand years of age, ought to stand for precision and acumen far higher than the comparatively recent and ever changing systems of law and theology. But we find ourselves, if possible, in a worse position than either. As the jurists are ever pointing back with triumph to Hale, Coke, and Littleton, and the theologists to Chrysostom, as men the like of whom they never will see again, so medicine triumphs in the worthies that are gone, and depreciates in comparison those that remain behind. Distance ever lends enchantment to the view: the faults of the dead are glozed over; their frailties forgotten; their good deeds alone embalmed in memory. *De mortuis nil nisi bonum* is the motto for the past; *De viventibus nil nisi malum* is too often the motto for the present. Even in Solomon's time, a period to which all can look back as being grander than any other that history records, there were individuals whom the preacher rebuked for saying that former days were better than their own; and in the Augustan age of Rome, we find Horace speaking of those who were *laudatores temporis acti*. Strange commentaries these on the time hallowed notions of the value of experience. "Experientia docet", say our tongues at one moment; while at another they grumble, "knowledge grows only as a cow's tail, downwards."

We may, however, say that theory and practice on this subject are far more nearly united at the present day than they have ever been before. "Look forwards, not backwards," is the motto of a vast number of individuals; and each one feels that, if he is to excel in the race of life, he must not be constantly turning to consult those who ran before his day. He must be like the mariner who looks ahead for the shoal, the lighthouse, and the buoys; and not like the oarsman, whose

back is ever towards the goal. In this respect, we may say that the present generation are cutting their wisdom-teeth, and practically testing the truth of the real value of experience.

But there are a vast number, nevertheless, who have still a strange jumbling of ideas respecting experience in general, and especially in those departments of knowledge to which experience is commonly supposed to be necessary. The world in general admires and pins its faith on the practical man, who is handy with his tools, quick with his fingers, and a close stickler to his business alone and the good old ways of his fathers; and they deride and discourage, if they do not persecute, the inventor who prefers his newfangled plans to ancient customs; and their opposition is often proportionate to his apparent ingenuity and success. Yet in the next generation the inventor is almost worshipped; and no epithet is sufficiently strong to express the contempt which is felt for his opponents. What has happened in the past, is taking place around us daily; and we are not more perfect than our ancestors.

The reason of all this is obvious; it consists essentially in the indolence of our own minds, which prefers to take a general verdict rather than exercise its own independent judgment. The majority prefer to go with the herd, and to follow the leaders rather than to be leaders themselves. This indolence of mind has ever existed in the human race, and will do so to the end of time. It runs through the whole history of medicine, tincturing it with one particular hue, and in one form or another, showing itself in every individual man—even in those who appear to be most ardent and energetic in the pursuit of knowledge. Of all the various forms this indolence assumes, none are more common than, *first*, to repose with implicit and unvarying security upon conclusions once formed; and, *second*, as soon as one error is exposed, to run for shelter to something the most directly opposed to the former one. We are content to toil on for years in the accumulation of facts, in the dissecting of former theories, and in the careful examination of the results of treatment, until at last we consider that we are in a position to build our castle and establish ourselves on a firm foundation; and, when once there, we allow nothing to shake us. The task of reconsideration is too great; and we are content to explain away new facts rather than pull our building down and reconstruct it for the sake of a single flaw—a fault from which even the mind of the great Harvey was not free. This affects us chiefly as individuals. The second propensity is more common in the mass. As in the older days of medicine, solidism succeeded humoralism, and this is again becoming in vogue; as vitalism succeeded chemicalism, and empiricism dogmatism; so we have seen in our own times that some have flown directly from allopathy to homœopathy, that the reign of pills and boluses has been succeeded by that of globules, and heroically large doses have been supplanted by absurdly and infinitesimally small ones. Indiscriminate venesection is being replaced by another system in which bleeding has no place; and the antiphlogistic treatment of inflammation is fading away, while a totally opposite system is advancing. Tired of such oscillations, the mind too often gets weary, and determines to make a stand; it adopts the most popular theory of the day, and thenceforth, like a constant lover, refuses to see any fault in its deliberate choice.

We see this fact exemplified under many different circumstances. Let us take one example—John Hunter—a name of which we all are proud, and whose memory we revere. One of the characteristics of the man was, that his theories were constantly changing as new facts were developed. Eager to interrogate Nature, his interpretation of her teachings varied with every answer he received. The views he taught as true in one year, he proclaimed as being unworthy of confidence in the next; and his students had to hold fast by his skirts, and to make rapid strides, to keep up with his seven-league steps. By the young and active minded, he was almost adored; but as they progressed in years, and lost the opportunities they once had for acquiring knowledge, they lagged behind their successors. It was ever the youngest students who came in for Hunter's newest views; the older ones got weary in changing perpetually. Tired of seeing, as they thought, the weathercock constantly veering, they determined they would not look at it; so they reposed upon the idea that it would continue to point as they last had seen it. In other words, the first admirers of Hunter gave him at last the cold shoulder; and he was unpopular amongst his contemporaries, for the very reason that we respect him. He was ever for gaining more and more experience: his contemporaries were content with what they had.

If we might take other examples from history, we would point to the frequency with which despotic misrule is hailed as a boon after a series of political disasters arising from visionary theories. Nothing more than the wild views of the republicans of France paved the way for the accession of the first and third Napoleons; and nothing in theology has recently given so great a number of adherents to the Church of Rome, as the desire to find in its despotic sway a rest from the conflicting teachings of the various parties into which Protestantism has been divided. There is a time in the existence of every one when controversy loses all its charms, even though it promises the acquisition of truth; but this rarely happens until the period when the grasshopper is a burden, and all desire fails.

Leaving, however, these generalities, let us examine a little closer into the popular fallacies which hover round the proverbs respecting experience. The word simply means a knowledge obtained by personal observation and repeated experiments or trials. But, in common parlance, it has a far wider signification: it implies not only the means of learning, but the learning itself; and an individual who has had abundance of *opportunities* for acquiring knowledge is supposed absolutely to possess it. Thus age and experience are words commonly associated together; and the union of grey hairs and wisdom has long been held sacred. There can be no doubt that experience is not one of the attributes of extreme youth; a boy can have little knowledge of the ways of the world, and of the instability of human things: we allow at once that he must gain his wisdom by experience. But here we stop, and ask, Does he continue to gain experience after a certain period? Does his stock of knowledge unceasingly increase from the cradle to the grave? Is old age necessarily more experienced than middle life? and middle life than mature youth? Is the man who sees his thousands of cases annually, and who spends almost all his waking hours at the bedside, more learned, more practical, more trustworthy, more experienced, than the man whose time is divided between his patients and his library? Do we owe the advances which have been made in medicine to the former, or to the latter? In answering these questions, the old story of "Eyes and No Eyes" starts to our recollection; and a host of other memories crowd upon us to show that it is possible to live in the midst of interesting phenomena, and yet to be unconscious of them all. The shepherd knows little of the nature of the mountains over which he leads his flock, or of the movement of those stars to which his eyes are so frequently turned up. The seaman knows little of the course of storms, or of the countless fish that are daily swimming near him. But, as a general rule, the world believes that the mariner must know more of the weather than a simple landsman; and that the man who sees with his own eyes must necessarily know more than he who sees chiefly through those of others. Thus we have individuals pinning their faith upon the bone-setter and quack, if they have large practice, to the exclusion of the educated surgeon who has more limited means of observation. Monthly nurses, midwives, and old hospital sisters, whose time is spent in the closest intimacy with sickness and death, are believed by the multitude to know more than the physician, whose relations to his patients are more restricted. Not long ago, there was a celebrated woman in the midland counties, who went by the name of "the wise woman of Wing". Her practice was so enormous that a railway company made a station for the convenience of her patients, and her votaries had to wait for whole days ere they could obtain an interview; yet all the means she had of obtaining knowledge was having been a nurse (or servant of some kind) in a hospital; and the chief, if not the sole medicine, she used, was some preparation of quinine, which was generally made in a large brewing-tub.* While we smile at such credulity, we may endeavour to extract a moral from it, and to distinguish between that familiarity with broad outward appearances which passive experience gives, and that true knowledge which is obtained by reflection and the collating one fact with another. An individual who has the former alone can never leave the beaten track, while one possessing the latter can adapt himself to any circumstances, and bring out new truths.

Experience, then, we conclude, can only give wisdom when it is associated with a well stored mind, steady powers of observation, habits of continued thought, and a power of calm judgment. It demands memory, discrimination, elasticity mind, and self-reliance. Without these powers, experience is barren; and age is no wiser than youth. It was my fortune

* For an amusing account of this interesting lady, see a letter by Dr. B. W. Richardson in the ASSOCIATION MEDICAL JOURNAL for April 8th, 1853.

once to know a surgeon whose boast it was that he never read any book on medicine, as he was determined to trust to experience alone for an increase of his knowledge. He had a large practice, and ordered vast quantities of his favourite pills and mixtures; but he descended to the grave with the notions of his youth; for, though progressing in years, he stood still in medical science.

What this man did from deliberate choice, others do from paramount necessity. After they once leave the medical schools, they become so deeply immersed in a laborious practice, that they have not leisure to read, and are generally too fully occupied to think upon anything but the salient points of the cases under treatment. The mind, moulded in the form given to it by its teachers, and modified by its own individuality, remains in the form it originally assumed. It has neither the energy nor the knowledge necessary for remodelling its views; and the experience of such men is worth no more, than that of a railway guard confined for all his life to the same eternal round of duty on a short line. In conversation on this subject with a country medical friend in very large practice, he bitterly complained of the dilemma into which practitioners were thus thrown, and contrasted his own position with those of his town brethren. The latter, he remarked, were daily meeting their contemporaries, each of whom added to each other's stock of current knowledge; while those who laboured in a country district, could only get an increase of light from some occasional consultation.

But if experience alone, apart from reading and thought, is insufficient to increase our real knowledge, are we justified in running into the opposite extreme, and eulogizing reading and closet speculation at the expense of personal individual observation? Certainly not; for mere erudition is, we believe, as useless as mere experience. It is in the judicious combination of these two that true progress can alone be made. There must be the power to interrogate nature, as well as the wish to do so. There must be a question put, and an answer noted—not simply guessed at. A man who is contented with mere erudition, who is satisfied when he *knows* what is known by others, is in the same position as one who is content to see what others have seen, and no more. It is, as a recent author observes, the man who is intensely moved to know and see for himself, who extends the circle of what is known to be seen. As long as medical men pinned their faith on Hippocrates there was no growth in learning; no wisdom was gained by experience. The motto of each physician was "Experientia *Hippocratem* docuit"—not "Experientia docet *me*;" and so long as we pin our faith upon any writer, no matter how learned he may have been, so long are we doing our utmost to prevent the progress of knowledge.

Let us take some examples in which a most prolonged and varied experience has failed in giving us real wisdom or reliable information.

There are few diseases more generally known than hysteria. It has been before the notice of physicians for ages—the views taken of its true nature and of the best plan of treating it have been infinite. At one time, its cause was supposed to be in the uterus and its appendages; now it was held that women were hysterical simply because they had wombs; now because those wombs were ulcerated or otherwise diseased; now because the womb was a generative organ—and generative organs implied the presence of sexual passions—and sexual passions ungratified must produce hysteria; now the theory was that the womb was destined to undergo certain changes; and if its destiny were not fulfilled, the nervous system would undergo some changes, and play unusual pranks; now it was held that hysteria implied a desire for sympathy; and now that it implied a desire for marriage. We can now readily understand how such theories were built. We know that the disease is most common amongst females; that it is often connected with disorders of menstruation; that a touch on a uterine ulcer has produced an hysterical paroxysm; and that many an hysterical virgin makes a comparatively healthy wife. But we know, at the same time, that there were many other conditions present which were never taken into consideration. We doubt, however, whether these conditions would have been thought of, unless the treatment based upon the older views had become offensive to modern notions. The older theories led the physician to prescribe nasty medicine, castigation, purgation, leeches to the vulva, hip-baths, pediluvia, and the like. These failing, marriage was recommended with such delicate pertinacity that the world began to consider *hysteria* to be synonymous with *salaciousness*; and a fit of hysterics was supposed to be the analogue of the leaping of one cow upon its fellow. Others, taking another view of the complaint, armed themselves with the speculum. By this they considered they penetrated to the citadel of the disease—the stronghold of the almost invincible Proteus. With this instrument (if we take Dr. Lee's statement as correct) the sexual passion was duly encouraged, and any disease of the womb was cured. But success did not follow even this clever plan. Others attacked the disease with steady determination; now, with the mystics, they made an infinity of Mesmeric passes, magnetic sprinklings, or electric inductions; now they used strange charms of cabalistic origin; now they called to their aid the whole medical armoury of blisters, issues, moxas, cauteries, mercury, and the like; and now, with Fabian tactics, they did nothing but "put on time" with globules or bread-pills, hoping that the disease would at last disappear like the snows of winter.

So far experience has hitherto conducted us; but who is contented with the guide? Has experience, then, been wrong? Certainly not; for if she had been asked, she would have shown that there was little if any truth in the assumptions of her so called disciples. She would have shown that hysteria exists in males, who have no uteri; that it is frequently unattended with any signs of uterine disease; that it is rare in cases of cancer or other genuine diseases of the womb; and, as regards marriage, she would have shown that the complaint was as common amongst wives and kept mistresses as amongst virgins; that common prostitution is no bar to its presence, and complete virginity no lure for its accession. Statistics* recently collected have demonstrated that good has followed marriage in only twenty-nine cases out of three hundred; and that in four hundred cases, only one hundred and thirty had any appreciable uterine disease.

But the errors of our predecessors were not confined to the causes, nature and treatment of hysteria; they were equally at sea respecting those symptoms which they considered to be characteristic of the disease. Their reasoning was something like this, hysteria is a mysterious complaint, and common amongst young women; therefore every mysterious or unaccountable symptom in a young female is to be considered as hysterical. Of course, with such a pathology, experience was almost useless. With all the experience of the past, can any of us say that we thoroughly understand the disease, and are never baffled in its treatment? Can we even say whether it is a cerebral or an uterine malady—a disease of the body or an affection of the mind?

Let us next ask what experience has done for us in pneumonia. Has it enabled us to discriminate perfectly between acute phthisical deposition or strumous engorgement, and genuine inflammation? Has it yet taught us the natural history of the disease in town and country? Has it shown us why pneumonia selects the lower lobes for its seat, and phthisis the upper ones? Has it told us whether pneumonia is as definite in its course as is small-pox, erysipelas of the head, measles, or varicella? Has it enlightened us as to the best method of treatment? So far from having told us that there is one *proper* treatment, experience shows that it gets well under *all* plans, and in such proportions that it is morally impossible to draw any definite conclusions as to which is better than another. Thus, in a recent and very learned article in the *British and Foreign Medico-Chirurgical Review*, we have no fewer than thirteen thousand cases collected which have been treated by profuse bleeding, mild bleeding, and no bleeding at all. On the whole, the numbers are in favour of the old method; yet, when we dissect the returns, we are unable to give the palm branch to anyone. Of those who bleed largely the proportions of deaths vary from one in two to one in sixty-four; of those who bleed moderately, the proportions vary from one in three to one in twenty-seven; while of those who do not bleed, the numbers vary from one in two and a half to one in ninety and even to none at all. With such results, who can say that experience has made us wise in pneumonia? Who can affirm that he whom experience has taught to swear by venesection is inferior to him whom experience has taught to swear by expectancy? With the facts before us all such assertions must be valueless.

Let us take our next remark from the domain of surgery. What more common than strumous abscesses about the neck, or other exposed parts of the body? Surgeons for many years past have had abundant opportunities for studying the best methods of opening them, so as to leave the smallest mark behind; yet with all our knowledge we still see people seamed

* Briquet in *L'Union Médicale*. Quoted in *Medical Times and Gazette*, October 31st, 1857; and in *Ranking's Abstract*, vol. xxvi, p. 243.

with scars, whose origin none can ignore. As yet, the books have not got beyond the recommendation to open such places with the smallest possible lancet. I know of one person only—and sorry I am that I am unable to record his name—who has proposed to open the abscesses through the centre of one or more leech-bites, thus ensuring no scar beyond the well known one produced by these useful creatures. Where has the acumen of our leading surgeons been reposing, while their experience has been unable to suggest a plan originated by a parish doctor?

Once again, let us to turn to medicine, and inquire what experience has taught us with respect to fever. Starting with the notion that fever was a proof of increased action, the first line of rails along which the doctors ran was that of starving the disease, or knocking it down with sledge-hammer blows. After having exhausted all their efforts to reach the goal with credit, they changed their plan, and let things take their course. Then they endeavoured to lead out, through some of the natural emunctories of the body, the poison upon which they considered the disease to depend. By and by, again, they thought they saw in fever a mark of too rapid combustion of the frame, too energetic an expenditure of power; and they concluded that the extraordinary waste of tissue must be met by corresponding profuseness of supply. Who can say that here we have learned wisdom by experience, or that we have done much more than clear away the ground for future observers?

Pass we on next to the subject of infantile convulsions. How common the complaint! how vast the amount of experience on the subject already accumulated! Yet all this experience was for a long period absolutely useless from being misdirected. False theory led to false practice; and false practice to false deductions. Young children were the most common victims to the disease; the most of them were cutting their teeth; lancing the gums sometimes relieved the convulsions; therefore it was argued, that the teeth were the most common causes of convulsions, and lancing the gums the most important means of cure. This being the pathology, the treatment was adapted thereto, and experience was developed only in our estimation of mortality, the effects of scarifying the gums, the time or duration of attack, and the most *unfavourable* methods of treatment. At last, some one more sagacious than his fellows saw that the previous experience was one-sided. He argued that all children had teeth; but that few comparatively had convulsions; and that of those who had convulsions, comparatively few were cured by lancing the gums alone. No sooner was attention aroused to these points, than experience suggested a variety of other facts which had long been ignored; and, for the first time, the substance was followed in place of the shadow, and the treatment therefore was rational; and the results were no longer as indefinite as deplorable.

If we turn to the action of remedies we meet equally with the influence of false or insufficient experience. Colchicum, says the practical man, is unquestionably good for gout. The *dictum* is at once adopted as a fundamental truth; and all that experience then pretends to do, is to ascertain in what manner the drug can be most satisfactorily exhibited. Passing by the facts that in many if not in the majority of cases of chronic gout, the drug is of no service whatever, and that many victims die from over doses, the physician attempts to extend his knowledge from the original *dictum*. Experience says, colchicum does good in gout; in gout, experience says, there is an excess of lithic acid in the blood, or in the urine, or in both. Experience says, colchicum diminishes in a notable manner the quantity of lithates in the urine. Therefore, says the inductive reasoner, gout depends upon lithic acid; and colchicum cures it by diminishing that ingredient. Following out this argument, the physician bethinks himself that there is an excess of lithic acid and of lithates in the urine in rheumatism, and concludes that colchicum will do good in that disease too. He gives it with unswerving faith; experience tells him that his patients get well, and he enlarges his inductive reasoning to believe that gout and rheumatism are more or less allied—if not identical. This process of thought seems so clear, that no farther consideration is given to the subject; and for years colchicum is supposed to be the chief reliable drug in these two complaints. By and by, however, it occurs to some more vigorous observer that experience has shown us that lithic acid abounds in the urine after an excess of animal food, after great exertion; and that lithates in urine are abundant in diseases of the liver, in influenza, and in every form of indigestion. In these cases he sees no particular results from the administration of colchicum; and he then, as Dr. Garrod has done, puts to the test the time-hallowed notion that colchicum really does diminish the lithic acid in gouty patients, and finds it totally devoid of truth. Dr. Garrod in a recent paper, after a most painstaking series of experiments, has demonstrated—1st, that there is not habitually any unusual quantity of lithic acid or of lithates in gouty subjects; *i.e.*, they have no more than is quite compatible with a perfectly healthy state; 2nd, that colchicum has no marked effect in diminishing the quantity when in excess; and consequently, that after all our so called experience in the use of this drug, we must begin our observations upon it almost *de novo* both in gout and rheumatism.

Let us borrow our next illustration from a recent article in *Blackwood's Magazine*, upon the circulation of the blood. From the earliest ages of medicine down to the time of Harvey, the popular belief was that the veins carried blood to the tissues. "It was thought that the arteries had their origin in the heart; the veins in the liver; and from the liver the veins carried the blood to every part. A single fact familiar to every surgeon and to every barber who ever opened a vein ought to have revealed the error, since, every time a ligature was applied the operator must have seen that the vein swelled below the ligature not above it; from which the deduction seems obvious that the blood in the vein flowed to the heart and not from it. But here, as in so many other cases," continues the author, "familiar facts were not observed—they were *seen* but not interpreted. Cæsalpinus was the first to notice this and guess the truth; a few years later Fabricius, under whom Harvey studied, discovered the valves in the veins; which, preventing any flow from the heart and only admitting of a current setting in the opposite direction, ought to have suggested to their discoverer the true interpretation of their use. But forty-five years elapsed before any one arose who had the sagacity to perceive the real value of this anatomical structure in respect to the blood currents—and when he promulgated his theory, he was, as we all know, most vehemently opposed, though for a short time only."

What has experience taught us in reference to the circulation of the blood and its disorders. For numbers of years, the heart has been considered the sole cause of the circulation of the blood; and whether the current has been too weak or too strong, it has unhesitatingly been put down to some change or other in the condition of that organ. If fever is present, venesection is resorted to, or antimony administered to diminish the force of the heart; and if, on the contrary, there is frigidity and pallor, stimulants are given to increase its power. Experience, we say, has taught us this; and with that we rest content. But is that all that we ought to have learned? Is the heart the sole cause of the circulation? and are disorders of the circulation due to the heart alone? Have the arteries and the capillaries no power? The late Dr. Dunn, of Scarborough, told me that on two occasions he saw the arteries in the umbilical cord pulsating for some minutes after the placenta had been expelled from the body; and, fortunately for him, he was able to fetch Dr. Kennedy (I think) as a witness. Mr. Wall, the House-Surgeon of the Northern Hospital, informed me that on one occasion he found the pulse at the wrist considerably faster than that in the carotid, and that this again was different from the pulsations of the iliac, and all different from the pulsations of the heart. Experience tells us that the circulation of blood begins in the embryo before the heart takes it up; that it will go on sometimes for many hours in the frog's tongue when it is separated from the body. The author in *Blackwood*, before quoted, has recently called attention to similar facts. He shows that circulation will go on in some of the reptile class for a long time after the heart has been removed from the body; that some so called monsters have been born without hearts, whose blood, it is to be inferred, circulated through their bodies and the placenta during their sojourn in the womb. Experience has shown us that circulation will continue apparently as usual, even though a degeneration of the heart has gone on to such an extent that scarcely a single muscular fibre can be detected after death. It tells us that the circulation through the liver is to a great extent independent of the heart, as there is the whole capillary net-work of the intestines intervening between the heart and the vena portæ. The same author states that, in fish, the heart only drives the blood to the gills, whence it flows into their aorta, whose circulation is far more rapid than that in the capillaries from which the blood came. Dr. Dowler, he states, has shown, in speaking of yellow fever, that the veins become frequently so distended with blood within a few minutes after the cessation of

the heart's action, that, when they are opened, the blood flows in a good stream, being sometimes projected to the distance of a foot or more. Experience also tells us that the arteries are always empty after death. Experience with the microscope has long told us that, from some cause or other, the motion of the blood is arrested in many capillaries, while the current in others is equable and steady; and Dr. G. Johnson has shown that, when this retardation has existed for some time in the kidney, the arteries of that organ are hypertrophied. With all this teaching, must we not conclude that there is a motive power in the circulating system entirely independent of the heart? and, as we can have ocular demonstration of the retarding power of the capillary vessels,* we need not hesitate in believing that in them resides a large, if not the largest, portion of this circulating force. In aid of this belief, the microscopist can bring in a host of analogical evidence. He is familiar with the circulation of the sap in the vessels of plants; with the march of the globules of chlorophyll round the cells of the *valisneria;* with the regular march of the nucleus, etc., round the inside of the hair of the *marchantia;* with the prolonged circuit taken by the plasma round the cells of the *chara*. He sees the sporules of confervæ enjoying the power of locomotion; and hosts of cilia moving perpetually, each of which are infinitely smaller than the finest muscular fibre. And if it be conceded, as unquestionably it must, that the capillary system has a motive and retarding power peculiar to itself, and entirely independent of the heart, how greatly must we modify our views of inflammations and fevers; and how comparatively useless is the experience accumulated without reference to this power!

Take another illustration from the obstetric branch of our art. From the earliest ages of the world women have borne children, and we see proofs that thousands of years ago midwifery was followed as a profession much the same as it is to-day; yet, with all the accumulated experience of centuries, no real knowledge appears to have been possessed of the natural position of the child's head as it was coming through the pelvis, until the advent of Naegelé, barely fifty years ago. The great William Hunter was here at fault, and the well known Smellie was no better. Why? Not because they lacked opportunity; not because experience was wanting; not because they were mere closet philosophers; but simply because they started with a fixed idea, and never cared to inquire into its truth. They believed the assertion drilled into their young ears as implicitly as any child believes in a mother's love. No doubt ever came into their minds; and, without doubts, there is no inquiry.

Ever since midwifery has been practised, the fearful nature of placenta prævia must have been known. Yet it appears to have been reserved to our own days for an extended and enlightened experience to teach the best method in which this accident is to be met. The same may be said of presentation of the umbilical cord, and the manner in which safety may be almost ensured both to mother and child in cases of contracted pelvis.

[*To be continued.*]

TREATMENT OF DIPHTHERIA.

By W. A. Bryden, M.D., Mayfield, Sussex.

Having been written to by gentlemen from different parts of the kingdom, with reference to a paper which I published in the British Medical Journal of November 21st, 1857, perhaps I may be permitted to answer them through the medium of the same Journal.

First, as to the cases in which I think the guaiacum to be most useful: I use it in all cases, whether of "diphtheria", properly so called, or of what in this neighbourhood we have styled "cynanche maligna". I combine it with the chloride of potash, and use a gargle of chlorine at the same time.

In cynanche tonsillaris, I order a warm bran poultice, sprinkled with vinegar, to be applied externally, and give the guiacum in ten-grain doses, with three or four grains of nitrate of potash, every three or four hours.

The following prescription is one which I have frequently used in cynanche maligna and diphtheria, the dose being for an adult:—

℞ Pulveris guaiaci ʒij; sacchari purificati ʒj; pulveris acaciæ ʒss; aquæ ℥vj. Misce, et adde potassæ chloratis ʒss. Fiat mistura cujus sumantur cochlearia ij magna 2dâ quâque horâ.

Instead of the application of the solid nitrate of silver, which I think often does harm, I always use the following gargle, or one similar to it:—

℞ Solutionis sodæ chlorinatæ ʒj; sacchari purificati ʒiss; aquæ ℥vj. M. Fiat gargarisma sæpe utendum.

I see that other gentlemen, writing since my paper was published, have been recommending both the chlorate of potassa and the chlorine in the treatment of diphtheria. Have any of them tried these in combination with the powdered guaiacum? and, if so, with what result?

CASE OF INTESTINAL OBSTRUCTION.

Under the care of S. W. J. Merriman, M.D., and T. Holmes, Esq., F.R.C.S.

[*Reported by* T. Holmes, Esq.

On August 27th, 1858, I was requested by Dr. Merriman to see a woman labouring under protracted constipation. The patient, whose name was Louisa Clack, aged 34, was a person of imperfect health, having a weak digestion; and had been under Dr. Merriman's care, at frequent intervals, for a good many years, for dyspeptic ailments, which required a more or less prolonged attention, as she very slowly regained that amount of health which with her constituted being "well". Latterly she had suffered from irregularity of the bowels, and had been liable to diarrhœa and colicky pains. On August 16th, the bowels had acted naturally, though scantily. She was then just convalescent from a prolonged attack of diarrhœa, lasting more or less since the beginning of June; and went into the country. On arriving at her destination, she was seized suddenly with great pain in the abdomen, and the belly swelled up rapidly to a great size. The bowels had not acted since this time, except once under the influence of enemata, when a small amount of fæcal matter had passed with the injection. Various purgative medicines had been given, but without effect. She had vomited for the first time to-day, only a small quantity of grumous fluid, apparently the contents of the stomach or duodenum. The tongue was very red and dry; the countenance distressed; the pulse weak and rapid. The belly was uniformly, but not excessively, distended (she was very fat); and there was no great tympanitis. She had complained principally of pain in the right iliac region, but this had been replaced latterly by pain in the neighbourhood of the umbilicus. There was nothing to be made out by palpation of the abdomen, except that, in the ileo-cæcal region, a large coil of intestine could be felt distinctly when any attack of tormina occurred. These attacks were rather frequent. The coil of distended intestine ran, as well as could be made out, nearly transversely across the abdomen, and therefore much below the situation of the transverse colon. There was no obstruction to the passage of a tube into the rectum, but it was arrested at a distance of about eight inches from the anus, apparently by a bend of the gut, and not a constriction, as any quantity of water could be passed without resistance.

From the readiness with which a large quantity of injection was passed and retained, as well as from the suddenness and completeness of the obstruction, and the pain being first complained of in the region of the ileo-cæcal valve, it was thought most probable that the obstruction was at or near that part of the intestine.

It was decided to try the effect of a powerful purgative; and, with this view, three pills, each containing half a minim of croton oil and five grains of compound extract of colocynth, were given during that night. They produced no effect, beyond a slight temporary aggravation of the colicky pain. Next day, she was in much the same condition. One grain of opium (in Dover's powder, or compound soap pill) was given every four hours. This gave her some relief; and on the following day (August 29th), her face looked certainly more calm. In other respects, she was much the same, except that the pain was more decidedly referred to the ileo-cæcal region, and that it was more easy to feel the coil of intestine above referred to. Chloroform was administered (which she took with wonderful rapidity and ease, becoming quietly insensible after very few inhalations), and a very large quantity (considerably above

* In thus speaking of the capillary vessels, we wish to include the parts or tissues through which they run, and not to attribute the power entirely to the thin elastic capillary cylinder.

three quarts) of fluid was pumped into the large intestine. When the bowel was thus filled, the overplus of the fluid flowed out, but the rest remained for some time, and then gradually escaped. No trace of fæces was seen in it. The opium was continued; but next morning (August 30th), as she complained of the pills making her delirious and sick, morphia was substituted for them; a few leeches were also applied to the right iliac region, with a view to relieve the pain there of which she complained.

The question of operating for the relief of the obstruction had been debated daily between myself and Dr. Merriman, with the assistance of Mr. Brunskill, who was also in attendance. We had also procured the opinion of Mr. Tatum. The whole course of the symptoms appeared to point to the lower part of the small intestine, rather than the large one; and therefore it was thought that the best course would be to cut through the abdominal wall in the right iliac region, expose the end of the small intestine and the cæcum, with a view of liberating the former, if it were found constricted by any band or adhesion, or of establishing an artificial anus in the latter, if the obstruction should prove to be situated further down. We were doubtful, however, of her power of enduring such a formidable operation as this would be in so fat a person. However, as it appeared to give the only chance of saving her life, it was decided that we should meet at her house the following day, prepared to perform the operation, if it should then seem justifiable. Up to this time, she had not changed materially for the worse. Occasional attacks of alarming depression would occur; but the pulse soon rose again; the lips were red; and she spoke in a tolerably firm voice. During the night, however, she became rapidly worse, and passed into a state of insensibility about 5 A.M. At 7.40 P.M., she died.

At the *post mortem* examination, the intestines only were examined. The coil of intestine, which had been felt during life passing across into the right iliac region, proved to be the sigmoid flexure of the colon, which had been forced by distension into this unnatural position. At the end of the large curve thus formed, and at a distance of sixteen inches from the anus, was a very tight stricture. This stricture would, however, in the dead body, admit of the passage of fluid; and the rectum was found full of semifluid fæces, which were thought to have been pushed down in the course of the examination. The stricture appeared to have been produced by chronic inflammation external to the gut, as the coats of the intestine were rather thinned than otherwise, while the cellular tissue around it was indurated. The mucous membrane was extensively ulcerated at the seat of stricture. The extent of the constriction was not more than half an inch. The coats of the gut, above and below, were quite healthy. The small intestines, towards their lower part, were intensely inflamed, the mucous membrane being of a dark chocolate colour, but not ulcerated or softened. There was no sign of peritonitis.

Remarks. Cases of obstruction of the intestines are always difficult and anxious to deal with, and usually end fatally. They belong to a class not much studied till of late years, and of which, therefore, no very large number of fully recorded cases are at present to be found. Every instance, therefore, which illustrates any new point in their diagnosis or treatment, is worth putting on record. The fact which is principally remarkable in this case is the error into which we were led by relying on the indications to be derived from enemata. It is true that this error was hardly to be avoided, inasmuch as there were no other symptoms at hand to guide us in our diagnosis; but it is a fact well worth remembering, in future, in determining upon the operation to be recommended in a similar case, that the quantity of water which can be passed into the bowel does not of itself prove that the large intestine is free from obstruction. This observation is the more necessary to be made, inasmuch as the quantity of water which can be injected has always been regarded as the most important feature in all obstructions which are beyond reach of the finger, and is held by many surgeons as decisive of the seat of the obstruction. Thus Mr. Moore says, "By far the most practically useful means of diagnosis in all cases, if properly used, is the injecting apparatus, since by it the necessity of opening the peritoneum, to relieve stricture, can be ascertained." (*Medical Times and Gazette*, 1855, vol. ii, 46; see also a case by Mr. Savory, in vol. i, 1855, p. 620.) And in the report of a case bearing a considerable analogy to the present, which appears in the *Proceedings* of the Royal Medical and Chirurgical Society (vol. ii, p. 117) by Mr. Anderson, that gentleman says, "The extent to which an abundance of water passed, the period of its retention, and the gradual mode of its dejection, together with a somewhat painful intumescence a little above and to the right of the umbilicus, and the flatness and softness of the abdomen below its line, led us to believe that the large intestine was free." The operation of gastrotomy was accordingly performed, and the obstruction was found to have arisen from a band of lymph crossing the small intestine. The symptoms of our case were very similar, allowing for the different position of the distended gut, which, however, was exactly in the situation of the small intestine running to the ileo-cæcal valve.

This case, then, will show that, in some instances (I suppose those in which a stricture is complicated by inflammation in another part of the bowel, as was the case here), fluid may pass upwards beyond an obstruction which is sufficient to prevent the passage of fæces downwards.* From this circumstance, I should be inclined to deduce the inference that the operation behind the peritoneum (Amussat's or Callisen's) should be performed in every case in which the symptoms are at all obscure.

I may also add a few words on the question of the time at which the operation ought to be performed. In the above case, the hesitation which we displayed in recommending the operation was justified by the suddenly fatal event, showing, as that event did, that there was some latent disease (perhaps a fatty condition of the heart) which would have precluded recovery, even if it did not cause the patient's death under the shock of the operation. It was, therefore, a matter of congratulation to us that we abstained from operating; but, in cases where no such objections exist, I would urge the propriety of operating at the earliest possible period after the existence of insuperable obstruction is ascertained. In the present instance, had we found the patient capable of bearing the operation, an artificial anus would have been established in the ascending colon from the right inguinal region; but, in any similar case which may occur hereafter, I should be rather disposed, from my experience of the deceptive indications furnished by the injection of a quantity of water, to perform the operation on the ascending colon from behind. If it be objected, that no account is given of auscultation and percussion during the injection, it is because the extreme obesity of the patient hindered us from forming any reliable conclusion.

While writing the above, I have received from Dr. Merriman the account of another case of obstruction, in which the fatal strangulation appeared to be due to the presence of a cystic tumour in the mesentery. I append the case, as an additional example of the obscurity which must attend the diagnosis of such cases. In this instance, also, an artificial anus in the right loin would have given passage to the fæces.

"I have just had", says Dr. Merriman, "another *post mortem* examination on a case of apparent internal hernia. The patient was a woman, aged 20, pregnant for the third time, and advanced about six months. She was married about three years ago, and about five months afterwards aborted, having experienced very great colicky pains; from which, however, she recovered, but had ever since been obliged to be very careful how she took food, as it always caused great internal pain. She bore subsequently a living child, and quite recently applied at the Western General Dispensary for advice. I did not see her myself until she was in a state of collapse, but I found that no fæces had passed for several days. The *post mortem* examination was made about twenty-one hours after death. On opening the abdomen, the small intestines were found of a dark chocolate colour, and much distended; fæcal matter in lumps was in the cæcum; but the ascending colon was hidden, and, when found, was contracted very much. Further search showed an apparent hernia of the ileum through the mesentery, but this proved to be the adhesion of the mesentery, about a foot above the cæcum, to the mesentery of the bowel, about two feet further up. The adhesion was extremely firm; and in close apposition with it was a cyst in the mesentery, which, when taken out and laid in the hand, measured nine and a half inches in circumference one way, and ten and a half in the opposite. There was no history of any blow having been received; but the disease arose, apparently, during her first pregnancy, and became fatal through the pressure of the cyst and the enlarged uterus. There was no peritoneal inflammation in this case. The cyst contained serum only."

* The fact of fæces having been found below the stricture after death is no proof that they had passed beyond it during life. The probability is, that they were forced through in manipulating the gut during the *post mortem* examination.

Transactions of Branches.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

NOVEL PROPOSITIONS ON GOUT AND RHEUMATISM.

By Frederick James Brown, M.D., Chatham.

[*Read October 29th.*]

I am desirous of laying before you certain views respecting gout and rheumatism, which I have embodied in the following propositions:—

I. *Gout and rheumatism never co-exist.*

That is to say, there is no such disease as rheumatic gout.

This, I beg to observe, is the opinion of Dr. Garrod and of an increasing number of physicians. The disease termed rheumatic gout is really gout affecting the large joints. It is commonly met with in licensed victuallers, and it has a duration of four months.

II. *An individual with the gouty diathesis never at any period of his life has rheumatism: and conversely, that an individual with the rheumatic diathesis never at any period of his life has gout.*

This proposition is put forward as original, and requires proof: it is on its trial.

My belief is, that every pain commonly termed rheumatic occurring in an individual with the gouty diathesis is in reality a gouty pain: and that gnawing pains in muscles, membranous layers, and joints, arising from exposure to damp, are properly to be termed gouty in gouty individuals, and rheumatic in rheumatic individuals. To discover the diathesis, it is necessary to learn the family history, hereditary influence being clearly marked in gout. There are indications also which enable us to conclude that an individual has the gouty diathesis, such as red gravel and renal calculi, tophaceous deposits in the outer ear and elsewhere, one form of dyspepsia, inequality of temper, habitual condition of the urine, etc.

Women whose fathers have suffered from gout commonly present the minor symptoms of the same disease; but these symptoms are very often regarded as appertaining to other complaints, and the pains are termed rheumatic. In such women, bloody urine and renal calculi are frequently observed.

My desire is to introduce exactness into our professional terms, as a loose mode of speaking and writing horrifies those that delight in strict language, and confuses those that are less particular.

III. *Gout affects the system occasionally as an acute general fever, like acute rheumatism (which is termed by the public rheumatic fever).*

Thus there is a podagric or gouty fever, like as there is a rheumatic fever. If there be any objection to the term fever in these cases, let the term acute general gout be employed, to correspond with the term acute general rheumatism.

Those that choose to designate the complaint fever, are justified in doing so by the analogy of catarrhal fever and of biliary fever—in both which affections there is toxæmia and nervous disorder, even as there is in rheumatic fever and in gouty fever.

Many cases now termed acute rheumatism or rheumatic fever, are really cases of gouty fever. They are to be distinguished by the discovery of the diathesis, by the presence of uric acid in the serum of the blood, by the duration of the complaint, and by the effects of remedies.

The mode of detecting uric acid is familiar to you through the writings of Dr. Garrod. This acid, once detected, enables us to pronounce with certainty on the nature of the complaint under examination. It is fervently to be hoped that, one day, we may succeed in inducing an attack of gout in one of the lower animals, in like manner as rheumatism has been produced in dogs by Dr. Benjamin W. Richardson, by the agency of lactic acid.

IV. *The duration of gouty fever bears a triplicate ratio to that of rheumatic fever.*

Thus, whilst rheumatic fever has a full duration (in severe cases) of forty days, gouty fever endures one hundred and twenty days.

There are many mild cases of rheumatic fever which last only twenty days; and physicians have reported cases yielding to treatment in nine days. I do not know whether there are corresponding cases of gout; but I have never seen any subside under four months.

In bringing this short paper to a conclusion, I have only to state that it is suggestive of inquiry, and not by any means demonstrative. The propositions are laid before you to be proved or disproved, according to the answer that Nature may give when rigidly interrogated upon the subject.

Periscope.

EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.

THE INVESTIGATION OF EPIDEMIC DISEASES BY COMPARATIVE EXPERIMENT.

The following is an abstract of a paper published by Dr. B. W. Richardson in the *Edinburgh Veterinary Review* for October.

In the study of epidemics, there has obtained, up to the present time, but one general line of research; that, namely, which endeavours (by the observation of those external conditions to which the sufferers from the epidemic disorder have been exposed prior to or during the epidemic occurrence) to trace the cause as well as the course of the disease from the external world to the body.

In this line of inquiry the Epidemiologist summons into play a large array of facts and arguments. He considers questions relating to the conditions of atmosphere, and the evidences that the disease, whatever it may be, has or has not spread by personal intercourse. He takes up the obscure problem of "predispositions." He speculates whether an affected body can have received into itself a poison, and if so, by what means. Suspecting vaguely the fact of poison, he asks, Was the poison organic or inorganic, gassiform, fluid or solid? He compiles records of great epidemic events, and calls these records statistics. He cons his statistics in hours of leisure, deduces certain assumed facts from them in relation to the influence of season, age, sex, population, or locality; and endeavours thus either to educe some law or laws of a positive kind, or, which is nearly as good, to eject certain common hypotheses or theories with which the history of the disease has been corrupted.

It is painful to say as a fact, yet a fact proper to be said, that the research thus laboriously undertaken does not tend to produce such proofs of unanimity, and such positiveness of science, as might from *à priori* reasoning be assigned to it. This research brings out negations. This research sometimes brings out partially accepted positives—that is to say, sufficiency of positive evidence, occasionally, to satisfy a section of men; but as yet it has failed to educe one universal demonstration—in other words, one consummative fact which all men educated to the same mark can see, read, and accept.

In regard to any part of science, in regard to any phenomenon of nature, when the belief in the explanation of the phenomenon is in the position now depicted, the evidence is demonstrative, not that the fact is known or near the light, but that it is unknown and far off.

It is often said by us, when our data, however elaborate they may be, are insufficient to satisfy the mind, that what is wanted for the further elucidation of the matter is more of fact. We have all thought this often, and felt it often. But it is curious that as individually we endeavour to elucidate further, by wider collection of materials, and strain the intellect towards a more perfect appreciation of the whole by one grand generalisation; the mind, instead of becoming strengthened by a sensation that each day's work brings it nearer to the truth, feels each day as if moving from the central position rather than nearing it. A superficial glance, and an explanation lies within reach; a pursuit, and that explanation is gone, and another, equally unsatisfactory on closer acquaintance, is in the field.

Dr. Richardson would not, however, have it inferred that our present systems of inquiry are worthless. He is not sceptical as to the utility of our present *organon*, but very sceptical as to its rapidity of result; and the question he wishes to propound is: Whether there be not a more direct course to the settlement of many of the various difficulties by which our studies are surrounded, and one which might lead us to see the fruits

of our researches even in the term of our own lives? A long practical acquaintance with experimental physiology, while it has given to him insight into certain general facts or laws connected with the ruling phenomena of life, and the modifications of such phenomena, has fixed on him the conclusion, that comparative experiment, rightly turned to the elucidation of those constantly occurring disturbances in human bodies, which we recognise as epidemic sicknesses, would lead direct to an acquisition of knowledge positive in kind, comprehensive in meaning, and rapid in its results.

In the way of physiological research into the cause and the course of epidemics, two paths of inquiry occur.

The first mode consists in subjecting animals, under varying and controllable circumstances, to the supposed or known virus of certain epidemic diseases to which the animal is susceptible.

The second mode consists in subjecting a susceptible animal to the influence of simple agents, with the nature of which we are acquainted chemically, and which are known to be connected in the body with the presence of some specific disorder; to endeavour, in a word, to produce disease by artificial means.

I. In taking up the first point of inquiry, it would be no disadvantage that the inquiry itself be of necessity limited to a few diseases, and to a few specific points. Such inquiry must indeed be limited to a few diseases, because there are but a few animals which could be selected for experiment, as being definitely susceptible of diseases identical with certain of those which affect the human body.

The pig, Dr. Richardson knows, from direct observation, is susceptible of small-pox and scarlet fever; and he adds, from correct though not personal knowledge, that it is susceptible of typhus and plague.

Experiments might be instituted, not only in reference to the transmission of the disease by inoculation, but to the effects of applying the small-pox virus to the mucous surfaces; of dividing the dried pustule into minute fragments, and diffusing these in a close chamber in which the susceptible animal was placed, so that their inhalation by the breath would be secured; and of administering the alvine excreta of a small-pox patient to the susceptible animal. The experiments might extend to the effect of the volatile excreta. The expired air of the small-pox patient collected, might be diffused through a closed chamber for containing the animal. Again, the pathology of each successive stage of the variolous disease might be traced out by infecting a sufficient number of animals at the same time, by subjecting them to the same conditions, and destroying them rapidly at successive times, marking successive stages of disease.

Scarlet fever affords us no positive specific virus for experimental purposes; yet with a susceptible animal there is abundant room for experimental research. The emanations from the breath might again be collected, the epithelial scales might be diffused through air; and to such emanations, gaseous and organic, the susceptible subject might be exposed. In scarlet fever, the peculiar mucous secretion eliminated in the neighbourhood of the tonsils should be used experimentally by inoculation, and the excreta both renal and alvine, administered to the animal by the mouth.

The same inquiries which have been sketched out as belonging to small-pox and scarlet fever admit of being extended to typhus; and this, with the advantage that the animals subjected to experiment are numerous. The dog and cat may be considered fair subjects in this research. As yet, the problem has to be solved by experiment, whether the excreta, volatile, or otherwise, of the typhus patient, are capable of transmitting the disorder. There has been great speculation on this, much evidence in favour of an affirmative, but no absolute proof.

Could the fact once be established by experiment with some known producing epidemic poison as small-pox virus, that such poison could be so dispersed in air, that by coming into mere contact with mucous surfaces, it would set up the disorder, then would there follow a beautiful series of inquiries relating to conditions of an external kind, of temperature, of moisture, of dryness, of electrical states of air, as well as peculiarities of season, in all their varied influences on the operation of the poison. We ordinarily set down these agencies as influencing the body of the exposed individual, rendering him, as it is said, predisposed to disease or the converse. A little thought, however, leads to a different view, and to the suspicion that it is on the specific poisons of epidemics in relation to their development, their diffusion, and their reproduction in the body, that the external influences tell; rather than on the man or on the animal. We know that certain inorganic substances are or are not poisonous to animal bodies, according as they are modified by externals; according, in other words, to their physical condition, at the time when they come in contact with the animal. By analogy, therefore, the same rule might be applied to the unrecognised and organic poisons. Experiment, however, is called for, that the supposition here offered may be reduced to proof or disproof. See, in a single example, how wide, yet how childishly simple, is this one question. Experience has shown that in the tropics small-pox cannot be propagated at certain seasons by inoculation. Yet experience, because experience must be carried to defined experiment to answer the enigma, has not yet determined with precision, whether the failure of the operation is due to a modification in the virus, or to a modification in the subject into whose system the virus has been introduced. Yet this question, in all its simplicity, is so profound, that the whole subject of prophylaxis turns on its solution.

II. The method of arriving at correct conclusions as to the cause and course of specific diseases, by attempts to implant certain of these in healthy animals by artificial means, is of modern origin. This method aims after results by three classes of operations:—

1. By interfering with the natural function of some organ or part. In this manner Bernard, by division of a portion of the nerve system, has induced a temporary diabetes; Brown-Séquard, by division of the spinal cord, epilepsy; other experimentalists, by arresting the function of the kidney, have produced anæmia.

2. By the administration to the healthy animal body of parts or structures which are recognised as belonging to certain organic structures. Thus Von Siebold, Küchenmeister, and others, have by this process explained the migrations of certain of the entozoa, and the origin of the diseases called cystic or hydatid, to which the human as well as the lower subject is susceptible, and the nature of which was at one time as profound a mystery as is that of cancer at the present hour.

3. By ascertaining the nature of the matters evolved in the excreta, whether volatile or fluid, during the course of certain disorders, and by testing by experiment whether the matters thus evolved are to be considered not as mere concomitants of the disorder, but as causes absolutely of the symptoms by which the disorder is manifested. In this direction, by connecting the fact of an acid fluid being eliminated from the skin during some forms of fibrous inflammation, with the experiment of introducing the same, or an analogous acid, into the circulation of a healthy animal, Dr. Richardson has been enabled to prove to demonstration, that a series of symptoms and of pathological changes may be induced by the acid identical with the acute and prominent symptoms which characterise the diseases in which such acid excrete is abundant. By the same method of research, a most laborious inquiry into the possibility of inducing cholera in the lower animals by the administration of cholera excreta, has been pursued by Dr. Lauder Lindsay.

4. By exposing animals to the action of certain common external agents, and by recording the results, as notes of comparison, in relation to the symptoms and pathology of various disorders. In this direction, Dr. Richardson has produced pneumonia by the inhalation of an air surcharged with oxygen, a result foreshadowed by the distinguished Beddoes; and a peculiar kind of fever, by the administration of the alkalies.

The production of specific diseases has been said above to be a fact of modern growth. But, accidentally, there is a grand exception. In the practical act of propagating a disease by inoculation, as by the inoculation for variola or vaccinia, a distinct and most important physiological operation is performed. As an operation, moreover, although empirically educed at first, it teaches all that an operation, such as it is, could teach, even though suggested by an experimentalist; and had the simple process of propagating small-pox by the introduction into a healthy body of small-pox virus been a new thing physiologically suggested, we should hardly know how to appreciate too fully all its interest and its bearing. Because it comes on us as an old fact, we pass it as a known and exhausted problem. But, in truth, instead of being the ultimate, this simple business of inoculation is the beginning of an inquiry, the boundaries of which are as yet scarcely approachable.

In following out the physiological inquiry by the third process of research, alluded to above, the first step would consist in learning the general chemical characters of the excreta of patients suffering from the epidemic—of separating these excreta into their constituents, and of applying such of these as

may be found foreign or in excess, to the test of experiment as to their disease-producing properties.

Bearing on the fourth point of inquiry, instead of dealing longer with propositions, Dr. Richardson passes to show, by direct fact, how experiment has been turned to account in his own hands, in the study of the symptoms and pathology of what is commonly known as typhus fever.

Whatever may be the origin of typhus fever, whatever its mode of propagation, there has existed for a long time a knowledge of certain general characteristics, which map it out as a disease, and centre it as a point around which many other allied types of disease concentrate. Our forefathers advertised this disease and its modified forms by the term "putrid," because, during the changes of structure which the sick body undergoes from it, there are outward appearances akin to the process of decomposition of dead organic matter. There was an apt quaintness in the simile, and even a large share of scientific truth. In some common respects the common observation of all observers has thus recognised the diseases under debate: the breath offensive, the secretions depraved, the tissues softened, and the blood preternaturally fluid. Modern observation has analysed these general facts. The researches of Reuling and Blair especially have shown that, in typhus and its ally, yellow fever, the breath, as well as the fluid and solid excreta, are alkaline, from the presence of ammonia. The blood-corpuscles of the fever patient are more or less disintegrated, and are changed into amorphous heaps; their adhesion in rolls is lost, the colouring matter is easily removed, and they rapidly dissolve. Dr. Blair, in describing the same cells in yellow fever, says that in many instances they were entirely dissolved, so that in a specimen of blood no trace of corpuscle could be found. Dr. Cormack, in describing the pathology of the Edinburgh fever in 1843, remarks on the blood corpuscle, that he and Dr. Allen Thomson examined the blood of a large number of patients, and found, both in the pyrexial and apyrexial state of the disorder, that the globules were serrated and notched. Other observers, from the time of Mitchell, in 1741, to F. Vernon, Andral and Gavarret, and Dr. Blair, have dwelt on the dissolved condition of blood, and on its deficiency of plastic power, either from absence of fibrine, or modification of this plastic constituent. Lastly, a multitude of observations confirm the view, that the softened condition of the tissues, the petechial effusion, the dark vomit, and alvine discharge, are connected with the fluidity and disintegration of blood.

Connecting these accepted and demonstrable truths with certain facts which experiment placed before me, as to the condition of blood acted upon by the alkalies, Dr. Richardson has instituted a prolonged inquiry into the effects of alkalies on animal bodies. The result has been to produce artificially classes of symptoms and groupings of pathology which are synonymous, as he opines, with the symptoms and pathology of typhus, and, it may be, of the low febrile states which are allied to it.

The following symptoms and pathology attend the slow and persistent introduction of an alkali into the blood. The symptoms commence with rigors, sometimes with vomiting. As the body comes more under the influence of the agent, the tongue assumes a dry and barked appearance. Sordes form on the teeth; there is constant tremor and jactitation of muscle; there is evident sensitiveness to sounds to an intense degree; there is perverted vision and depraved appetite. At one time the appetite is ravenous, at other times food is not touched. During the whole course of these symptoms the circulation is quick and feeble, the breathing short and irregular, or easily disturbed. If blood be drawn, its dissolved condition is obvious; it has lost, even though from arterial or capillary sources, its bright red colour, and communicates a dirty, dark muddy stain. It does not solidify, or, at most, forms a mere treacly mass, the result of evaporation of watery matter. The excreta are peculiarly changed. The urine is scanty, and fæces in the earlier stages of the disorder become white and hard; in the latter stages there is often a relaxation of the bowels, but the ejected matter is made up of mucous excreta intermixed with blood, not of ordinary fæculent matter. If the experiment be pushed to an extreme, coma supervenes, attended with spasmodic breathing, singultus, general jactitation of muscle, and death.

The pathology is strikingly characteristic. The tissues are dark, softened, and shrunken. The serous surfaces are covered with dark defined petechial spots, The vascular organs are charged with blood, and spongy in texture; and the blood is found dissolved, its corpuscles disintegrated, and its plastic power gone.

All the alkalies pushed to their extreme possess the property of producing these conditions. But to the volatile alkali and its salts the effects specially pertain.

Often, in histories and theories on epidemics, a confusion is manifest as to the relationships which exist between the poison or virus by which a disease is propagated, and the agent by which the symptoms or phenomena of the disease are produced. A rigid physiological investigation would clear up this obscurity; would show to demonstration whether the immediate cause of the symptoms is to be referred to the poison which was conveyed primarily into the body, or to another product altogether, resulting from modifications of nutrition, as the consequence of the interference or disturbance produced by the original poison. Upon a correct answer to a question so important as this, rests the whole matter as to the so-called process of zymosis. Dr. Richardson is inclined to infer that the symptoms which characterise all our great epidemic visitations, are only secondarily dependent on the original poison, and that they are due to a product generated or developed in excess within the body; a product, it may be, different in every respect, chemically and physically, from the prime virus, yet arising itself from the introduction of the virus. Thus the typhus symptoms which follow putrid inoculation are marked by such an excessive alkalinity of blood, that the presence of the alkali accounted fully and by analogy for all the phenomena. But it is clear that this cause of the phenomena was but the product of some new modified process in the nutrition of the body, caused by the presence of the putrid matter. But however this debateable point may appear, either on the one side or the other, there is the satisfaction of knowing that a careful series of inquiries by experiment would resolve it, and make this and all the great evidences derivable from it perfect demonstrations.

Dr. Richardson sums up by stating that it might be proved by experiment—

1. In what excreta of an affected animal the poisons of certain specific epidemics are located.

2. By what surfaces of the body such poisons may be received, so as to excite their morbific effects.

3. Whether the virus of a disease acts in the production of the phenomena of the disease, primarily or secondarily, *i.e.*, by its own reproduction and presence, or by the development of another agent.

4. Whether the effect of climate, season, temperature, moisture, and the like, in their influence on the spread of epidemics, act by modifying the poison which excites the epidemic, or by modifying the condition of the individual who is exposed to the poison.

While the solution of any one of the problems suggested above would be a fact of the time, the inquiries themselves lie open to the veterinarian even more invitingly than to the physician. His opportunities are greater for such researches, and his increasing science is leading his mind each day nearer to the appreciation of their worth.

British Medical Journal.

SATURDAY, NOVEMBER 6TH, 1858.

OUR PREVENTABLE MORTALITY.

A FEW weeks ago, we commented on those parts of the valuable Report of Mr. Simon and Dr. Greenhow which had reference to the excessive mortality produced by lung-diseases. We now return to the consideration of the Report, taking up for notice some other diseases which are arranged by the authors among those the fatality of which is greatly increased by accessory—and often avoidable—circumstances.

"The *death-rates of young children*", says Mr. Simon, "are, in my opinion, among the most important studies in sanitary science. In the first place, their tender young lives, as compared with the more hardened and acclimatised lives of the adult population, furnish a very sensitive test of sanitary cir-

cumstances; so that differences of infantine death-rate are, under certain qualifications, the best proof of differences of household condition in any number of compared districts. And, secondly, those places where infants are most apt to die, are necessarily the places where survivors are most apt to be sickly; and where, if they struggle through a scrofulous childhood to realise an abortive puberty, they beget a still sicklier brood than themselves, even less capable of labour, and even less susceptible of education. It cannot be too distinctly recognised, that *a high local mortality of children must almost necessarily denote a high local prevalence of those causes which determine a degeneration of race.*"

The deaths which occur within five years after birth are arranged by Mr. Simon in two great classes: those resulting from unusual fatality of the common infectious disorders of childhood; and those due to the endemic prevalence of convulsive disorders, diarrhœa, and pulmonary inflammation.

In estimating the mortality from the common infectious disorders of childhood, it must be borne in mind that the death-rate may be greatly affected by the epidemic prevalence of any of the diseases at some particuiar time. For instance, on turning to Dr. Greenhow's statistics of small-pox, we find that,

"Out of 163 deaths that occurred in Ipswich during the seven years (1848-54), 91 took place in 1848-49, and 68 in 1854. In Norwich, 198 out of 212 deaths were in 1853-54. Out of 89 deaths in Yeovil during the seven years, 78 occurred in the single year 1849; etc."

The fact which has just been alluded to leads to the use of great caution in drawing inferences from observations extended over only a few years. It is necessary, indeed, to take a large number of years into consideration; and for this reason, apparently, Mr. Simon does not insist much on district differences of mortality from the infectious disorders of children, but refers to larger and more unmistakeable results of statistical observation.

One of great importance among these results is, that measles, hooping-cough, and scarlet fever, are, in the aggregate, more than twice as fatal among the two millions and a half who occupy the north-western counties, as among the four millions inhabiting the south-eastern quarter of England. And this is not to be altogether accounted for merely by the more close packing of the population in the north-western counties—although this circumstance may have its influence. For the mortality from non-infectious disorders among children is also greater in the same counties; which makes it appear as if all these causes of death, infectious as well as non-infectious, found their subjects in these places less able to successfully resist their influence. In other words, sanitary defects no doubt predispose to the excessive infantile mortality from the infectious disorders.

The cause of the different proportion of mortality from the infectious disorders of childhood in different parts of England, as well as in different districts, is, however, a subject for investigation; and, with Mr. Simon, we can but arrive at the supposition, which merely requires the support of absolutely observed facts to make it an incontrovertible axiom,—that

"*The wide range of local death-rates from measles, hooping-cough, and scarlatina, among districts where all the populations have undoubtedly had abundant means of becoming infected, leads to the conclusion that local influences of one kind or another must have been very greatly concerned in determining the proportionate fatality.*"

Small-pox has been kept aside for a special consideration—namely, in order to adduce some statistical facts which go to prove that some peculiar cause—in all probability, the attention to or neglect of vaccination—must have an immense influence in modifying the mortality from this disease. We have selected ten places of large population, from which, as a rule, small-pox is never absent, and in which it has, in all probability, had a fairly divided share of epidemic visitation. To show further the contrasts between the mortality from small-pox and that from the other disorders which have been noticed above, we have collected the average death-rates from measles, scarlet fever, and hooping-cough, in the same places. Here are the results; the numbers being the proportions in each 100,000 of the population.

Aggregate Mortality per 100,000.

	Small-pox.	Measles.	Scarlet Fever.	Hooping Cough.
East Stonehouse	146	59.5	126.5	68.5
Plymouth	134.5	60	126	72.5
Penzance	105	41	71	52.5
Portsea	101	34.5	77	41.5
Merthyr Tydfil	102	57.5	122	50
Newcastle-on-Tyne ..	47.5	52	77	82.5
Liverpool	41	107.5	118	94.5
Nottingham	40	70.5	66	61.5
Birmingham	37.5	61.5	113.5	62
Manchester	26	81	142	88.5

What can be made of this table? Take, for instance, East Stonehouse and Plymouth, and compare them with Birmingham. In all three, the death-rates from measles, scarlet fever, and hooping-cough, run nearly parallel; while the mortality from small-pox in each of the two former towns is more than four times as great as that in Birmingham. Combine and compare these numbers how we may, there comes out evidence that something besides ordinary hygienic influences must have a bearing on the mortality from small-pox. It is not necessary to dwell on this subject, which has already been amply commented on by Dr. Seaton, Mr. Marson, and others; and we may, therefore, merely adopt the words of Mr. Simon:—

"The presence of many small-pox deaths in local returns is evidence that vaccination is not satisfactorily practised. Accordingly, the very large continuance of small-pox to which I have adverted is among the most painful facts which are to be gathered from the registration-returns of England. To foreign nations, who have learnt from us the means of preventing small-pox, it must seem almost incredible that we still annually suffer four or five thousand deaths by the disease. And the Registrar General's last quarterly report is in this respect a curious illustration of the slow rate of social progress, containing evidence as it does that in *certain considerable districts of England, during the three months ending March 31st, sixty years after Jenner's discovery, deaths by small-pox were amounting to a fourth part of the entire district-mortality.*"

Turning now to the other disorders of childhood—convulsive or nervous diseases, diarrhœa, and respiratory inflammations—we find them carrying off annually about 72,000 children, making about one-sixth part of the total mortality of England. In regard to these, as in other instances, the question has to be answered,—How is it that the death-rates from them vary so greatly in different districts; seeing that the average death-rate produced by them varies from 925 to 6895 in 100,000? The answer, no doubt, lies in the explanation given by Mr. Simon, that

"The vast range of the aggregate mortality (among young children) in different districts of England is due to the varying prevalence of two local causes—

"First, to differences of degree in *common sanitary defects* of residence; some places abounding more than others in the foul air and foul water of undrained, unpaved, unscavenged, unwashed, unlighted, unventilated localities and houses.

"Secondly, to *occupational differences* among the inhabitants; there being certain large towns where women are

greatly engaged in branches of industry away from homes; where consequently these homes are ill kept; where the children are little looked after; and where infants who should be at the breast are improperly fed or starved, or have their cries of hunger and distress quieted by those various fatal opiates which are in such request at the centres of our manufacturing industry.

"Means do not exist for appreciating at all accurately the proportionate influence of these two sets of causes. That the second of them is of great importance cannot be denied; and it is on this account, as well as on other accounts, a thing greatly to be desired, that the large manufacturing employers of female labour should address themselves to counteracting, as far as possible, the domestic evils which result from that system of industry. But lest the proportionate influence of this cause should be exaggerated, it is necessary to observe that the highest death-rate among infants, not only from the diseases here spoken of, but likewise from infectious diseases, exists in a large town where the population is not manufacturing. Taking together the common infectious disorders of infancy with those nervous and diarrhœal and respiratory diseases which have last been spoken of—an annual total of more than 100,000 deaths—we find that they are distributed in different places according to an aggregate death-rate which ranges from about 1,303 to about 9,044; that the low rate belongs as an average to three of the healthiest districts of England, and the high rate to the one unhealthiest district; that the last is not a manufacturing town; and that the causes in operation there to produce its immense infantile mortality must presumably be those unwholesome conditions of dwelling which local authorities, under the Nuisances Removal Act and other sanitary laws, are specially empowered to counteract."

THE MEDICAL COUNCIL.

Since our last publication, we have learned the names of three new members of the General Council.

Dr. H. J. H. Bond, Regius Professor of Physic in the University of Cambridge, was elected on October 29 to represent that University.

Dr. D. Embleton was elected to represent the University of Durham in November 2nd.

Dr. John Storrar was elected by the Senate of the University of London, on November 3rd, to represent that institution.

For the appointment of General Medical Registrar and secretary to the Council, rumour states that there are many candidates in the field. So far as we can ascertain, however, the only gentlemen who have formally announced their candidature are Dr. Cormack; Mr. Booth Eddison, of Nottingham; Dr. Greenhill, of Hastings; Dr. Francis Hawkins; and Dr. Henry Holmes, of Over, Cheshire. But, as the Council may not meet until the first week in December, it is quite possible that other candidates may yet urge their claims to fill this important post.

THE WEEK.

We have no liking for specialties in medicine or surgery, and would apply to them the saying of the ungallant old caliph Abu Bekr regarding the ladies—"They are great evils; but the greatest evil of all is, that they are necessary." Admitting, then, to some extent at least, the necessity for specialties, it is always satisfactory to observe the adoption of any plan which has for its object to prevent the degeneration of specialty into the mere disconnected mechanical study of some part of the body. In our last number, we quoted the regulations adopted by the College of Dentists of England, in which it is provided that all persons who are desirous of entering that institution, after a certain date, must come provided with the diploma of the Royal College of Surgeons, or of a surgical licensing body. We now desire to call attention to the announcement of the Council of the College of Dentists, in our advertising columns, that they have made arrangements with Dr. B. W. Richardson for the delivery of a course of twelve Lectures on "the Medical History and Treatment of Certain Diseases of the Teeth and Adjacent Structures". The following are the subjects, several of which we do not remember to have seen properly treated on in their reference to dental surgery:—1. Introductory—The Constitutional and General Causes of Certain Diseases of the Teeth and the Adjacent Structures; 2. The Hæmorrhagic Diathesis, in its Bearings on Dental Practice; 3. Neuralgia in relation to Toothache and Diseases of the Teeth; 4. Hysteria, and allied condition, in reference to some forms of Dental Affection; 5. Dyspepsia, Rheumatism, and Gout, in relation to some abnormal states of the Teeth and neighbouring organs; 6. Diseases of Infancy and of Childhood, as dependent on, and as influencing, Dentition; 7. Purulent Affections of the Gums and adjacent structures; 8. The Pathological and General History of Exostosis, Necrosis, and Caries; 9. The History of Malignant Diseases involving the Organs of Mastication; 10. Diseases of the Teeth and Maxilla arising from the administration of Mercury, Phosphorus, Lead, and other Poisons; 11. On Diet and Modes of Life, in their influence on the Organs of Mastication; 12. On Chloroform and the Narcotic remedial series, their Physiological action, and their applications to Dental Practice.

The town of Bradford, in Yorkshire, has this week been the scene of a wholesale poisoning by arsenic, sold in mistake for another article. On Sunday last, the rapid death of two children, and the illness during the day of many other persons, led to an inquiry being made, when it was ascertained that they had all partaken of lozenges which they had purchased in the market on Saturday night. This led to further inquiry, and it was found that the lozenges had been sold by a person named Hardaker, a confectioner, who keeps a stall in the market, and who had bought them from a wholesale confectioner named Neal. It appears that in the manufacture of lozenges a composition named "daff" (*i.e.*, sulphate of lime) is extensively employed, and about a fortnight ago Mr. Neal purchased 12 lb. of it from a druggist named Hodgson, in Shipley. He was served by a young man named William Goddard, aged about 18, an assistant to Mr. Hodgson. The latter was ill in bed at the time, and Goddard, who had asked him where the "daff" was kept, went into the cellar for it, but by mistake brought the arsenic cask instead, and from it weighed 12 lb., which was subsequently mixed with the lozenges which had been ordered by Hardaker. On these facts being ascertained, the most prompt measures were taken by the chief constable of police, to prevent, as far as possible, further harm. At least fifteen deaths, however, were produced; and nearly two hundred persons suffered from the poison. The lozenges were found on analysis to contain each about nine grains of arsenic. The matter is undergoing investigation; so that there may be occasion to again return to it.

Association Intelligence.

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS, IN CONNEXION WITH THE SOUTH-EASTERN BRANCH.

The second meeting for the present winter session was held on Friday, October 29th, at 4.30, at the Town Hall, Maidstone; J. Connell Prance, Esq. (Maidstone), in the Chair. There were also present: F. Barham, Esq. (Maidstone); F. J. Brown, M.D. (Chatham); J. Wickham Barnes, Esq. (Islington); John J. D. Burns, M.D. (Chatham Prison); Daniel Culhane, Esq. (Dartford); James Dulvey, Esq. (Brompton, Chatham); Frederick Fry, Esq. (Maidstone); Samuel Gould, Esq. (Northfleet); J. H. Gramshaw, Esq. (Gravesend); William Hoar, Esq. (Maidstone); Henry W. Joy, Esq. (Maidstone); W. T. Keddell, Esq. (Maidstone); Adam Martin, M.D. (Rochester); Flaxman Spurrell, Esq. (Bexley Heath); Charles M. Thompson, Esq. (Westerham); and John W. Woodfall, M.D. (Maidstone); with the following gentlemen as visitors: George Turble, Esq. (Maidstone); and E. A. Steddy, Esq. (Chatham).

The minutes of the last meeting having been read and confirmed, the annual subscription of half a crown was paid by each member present towards defraying the moiety of the expenses of these district meetings not paid by the Council of the Branch.

PAPERS AND COMMUNICATIONS.

The following papers were read:—

1. Report of a Case of Rupture of the Heart. By J. W. Woodfall, M.D.
2. Some Novel Propositions on Gout and Rheumatism. By F. J. Brown, M.D.
3. These communications having been severally discussed, a lengthened conversation was held on the Nature and Treatment of Diphtheria.

VOTES OF THANKS.

The thanks of the meeting were unanimously accorded to Dr. Woodfall and Dr. Brown for their papers, and they were requested to allow them to be published in the Journal of the Association.

Thanks were also given to the Mayor of Maidstone for his kindness in allowing the members the use of the Town Hall, and for having had the rooms comfortably warmed and efficiently lighted.

After this, refreshments were introduced, as usual, and the meeting adjourned at 7.30.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, Oct. 18th, 1858.

W. H. Willshire, M.D., President, in the Chair.

DIPHTHERIA. BY R. H. SEMPLE, M.D.

Dr. Semple had been called down to Bagshot to see some cases of diphtheria, but he arrived about an hour after one of the patients had died: he found that the last fatal case was the third in the same family, the ages of the patients being respectively eight, twelve, and fifteen years. They died at intervals of about a week from each other; and while the funeral service was being performed on one of the children, the death of the elder sister, aged fifteen years, occurred. Dr. Semple, however, repaired to the house of the patient, in company with Dr. Blount of Bagshot, and obtained permission to make a *post mortem* examination of the body, although to a limited extent. Nearly the whole of the diseased parts were examined, consisting of the tonsils, a part of the tongue and of the pharynx, the epiglottis, the larynx, and the trachea. On the whole of these parts, the pellicular membrane, which is the characteristic feature of true diphtheria, was developed. It was especially necessary to bear this character in mind, because he (Dr. Semple) had reason to believe that, at the present time, many affections of the throat were confounded together, under the name of diphtheria, which had very little relation to that disease—at least, in the sense in which the term was used by Bretonneau, Trousseau, Guersant, and other French writers. It was especially necessary to exclude the scarlatinal sore-throats from the category of diphtheria, because scarlatina has no real or necessary connexion with the diphtheric epidemic. Other cases which were confounded with diphtheria were, ulcerated sore-throats of various kinds, cancrum oris, and even common tonsillitis. The true distinction existing between diphtheria and the malignant ulceration of the tonsils in scarlatina, was to be found in the circumstance that the pellicular exudation in diphtheria may be readily removed by the handle of the scalpel, leaving the mucous membrane below it, congested indeed, but smooth and entire; whereas, in the malignant ulceration of scarlatina, the substance of the tonsils is actually eaten away and destroyed. The fatality of diphtheria was quite appalling. Dr. Blount had attended eight cases of the disease in the vicinity of Bagshot, and every one of them had been fatal. Both the commencement and the termination of the disease were marked by peculiarly treacherous and insidious characters: the symptoms, at first, are so slight that they are hardly noticed by the patients or their relatives; and when medical advice is at last sought for, the pellicular exudation has generally reached the air-passages, when the hopes of recovery are almost extinguished. The termination of the disease is equally insidious, and is often quite unexpected; for, although many patients die with symptoms of well marked asphyxia, yet others perish suddenly by syncope while they appear to be going on favourably. Dr. Semple was remarkably struck with the circumstance that the locality where these fatal cases occurred was not one where one might expect, *à priori*, a malignant and fatal form of disease to prevail; for the surrounding country was open and beautiful, the soil dry, and the patients by no means placed in unfavourable hygienic conditions; nor did it seem that the disease attacked ill fed or puny children, for the girl, whose body was examined, was a plump, well formed person, moderately fat, and with good muscular development. The therapeutical management of this disease was a question of the greatest importance; but hitherto all kinds of treatment had been attended with very unsatisfactory results; the best treatment was, unquestionably, the application of strong caustics to the throat, at the very earliest possible period; and the hydrochloric acid, used in a concentrated form, was perhaps the best. This appears to stop the progress of the false membrane into the air-passages, and acts somewhat in the same manner as concentrated nitric acid in preventing the progress of phagedænic ulceration. When the false membrane has reached the trachea and bronchi, there is very little hope for the patient. The next question is whether, when this extension has taken place, the operation of tracheotomy—so much extolled and so extensively practised by the French physicians—ought to be resorted to. In the case of the girl at Bagshot, Dr. Semple was prepared to recommend the performance of the operation, if he had found the patient alive, and if she were suffering from the symptoms of asphyxia; but the *post mortem* examination proved that this proceeding must have been useless, for the false membrane was so extensively spread over all the air-passages that it could not have been removed, and it had so little tenacity that it would have broken under the forceps used for extracting it. True diphtheria, therefore, was characterised by the presence of the false membrane at the back of the mouth, extending, in the fatal cases, into the air-passages, and causing death by obstructing the respiration; and it differed, on the one hand, from those sthenic forms of throat-disease which were accompanied by full pulse, and the other ordinary signs of acute inflammation; and, on the other hand, it differed from those low forms of throat-disease which arose from a depressed habit of body, from unclean and unhealthy habitations, and from the complication of scarlatina. The extensive prevalence of diphtheria at the present day demanded the attention of the Government; it was sweeping off great numbers of the rural population, both young children and persons verging on puberty; and, from the peculiarly insidious nature of the early symptoms, it was generally neglected until remedial means were of no avail.

Dr. Stavely King doubted the propriety of tracheotomy in this disease. He thought the patient would die of exhaustion under the knife. Many cases of so-called diphtheria were merely cases of common throat affection; such as, on the one hand, was low form of angina in scarlet fever, and, on the other, sthenic croupal inflammation. He related some cases of diphtheria which had come under his observation, in which the early symptoms were very obscure. In his opinion, the disease was to the respiratory membrane what thrush was to the intestinal. He believed it had a confervoid origin, and that the effect of the poison, when absorbed, was, in its elimi-

nation, to set up a sthenic inflammation simulating croup. Hence his treatment, in the cases referred to, consisted in the employment of powerful counterirritation, the application of a leech to each side of the trachea, chlorine washes, and the administration of port wine, quinine, and chlorate of potash.

ON CHRONIC INFLAMMATION OF THE ARTICULAR EXTREMITIES OF THE BONES. BY T. BRYANT, M.D.

[This paper was published in the Journal for October 30th, pp. 933-5.]

MONDAY, OCTOBER 25TH, 1858.

W. H. Willshire, M.D., President, in the Chair.

INJURY OF LIMBS BY LOCOMOTIVE ENGINES. BY V. DE MÉRIC, ESQ.

Mr. De Méric called attention to the peculiar manner in which limbs lying across rails may become more or less injured by locomotive engines in rapid motion; and instanced the case of a young man, verging upon insanity, who was lately admitted under his care at the German Hospital. This patient had determined to commit suicide; and, after wandering all night on the 15th instant, went to the North London Railway between Dalston and Hackney, at about four in the morning, where he placed both his legs on one of the down rails. From his statement it would appear that he sat down, and allowed his lower limbs to lie across the rail, with the intention of putting an end to his existence; not thinking that he was possibly preparing for a dreadful mutilation which might not prove fatal. A coal train soon came flying along in the obscurity prevailing at this season so early in the morning; and it would seem that the right leg was caught and severely injured either by the wheel or the kind of ploughshare placed in front of the engines. The left, however, was probably hurled off the rail, for it did not suffer the slightest lesion. The fibula on the right side seemed to have been broken by the force of the shock, without a cutaneous solution of continuity; and it was likely that the tibia of the same side was crushed (a little higher up) against the rail, being thereby broken transversely, with severe lesion of the soft parts. The left leg must have been pushed and twisted away from danger by the right limb. The compound fracture was very severe, but Mr. De Méric said that he was trying to save the leg. He mentioned the case principally to put upon record the manner in which a limb may escape in the very perilous position in which it was placed.

ON THE TREATMENT OF INTERNAL HÆMORRHOIDS BY THE APPLICATION OF STRONG NITRIC ACID. BY HENRY SMITH, ESQ.

The author commenced his paper by a reference to the pathology of hæmorrhoidal diseases, alluding to the distinction between the conditions which obtained in external and internal hæmorrhoids. In the latter class, there were two forms which were mainly presented to notice: the first was where there were distinct tumours of a more or less vascular character, composed either of enlarged veins or of an aggregation of small arterial branches, and covered by the mucous membrane of more or less altered character; the second kind was that where there was not so much, if any, decided hæmorrhoidal tumour, as an unhealthy and preternaturally vascular state of the gut. In the first class, however, there were two distinct forms: the one was where the tumours were large, blue in colour, and evidently composed mainly of enlarged veins; these were troublesome and painful, chiefly from their bulk: the other was where the tumours were of a bright red colour, mainly composed of small arteries, exquisitely sensitive, and easily disposed to bleed, at times in very large quantities. As regards the treatment of these varied cases, Mr. Smith, in the first place, alluded to the importance of strictly attending to constitutional as well as local measures. By these means, many of the cases of internal hæmorrhoids which are brought before the surgeon may be, if not entirely, at least very much remedied; but in other cases, which are by no means unfrequent, so much suffering is produced, and such a length of time has elapsed since the existence of the disease, that surgical interference is necessary. Excision of internal piles has been almost entirely given up by prudent surgeons, as dangerous hæmorrhage has often followed the operation. The ligature was now the chief remedy in cases requiring operation; but, admirable as was this means of curing the disease, the trouble and danger attending upon it was sufficient to cause surgeons to hesitate in using it, if some other means equally useful could be found. The author alluded to some instances of death which had occurred, and, although recommending it as the only available remedy in cases where the hæmorrhoidal tumours were large and numerous, deprecated the employment of the ligature in the less severe cases. It was to these, and especially to those cases where the tumours were of moderate size, of a bright red colour, and prone to bleed, that the topical application of the strong nitric acid was so useful, not only as a palliative, but as a curative measure. Its application did not necessitate confinement to bed, and was not productive of danger, nor even of pain to any amount, if it was properly used. The author minutely described the mode of its application, and the means by which any unpleasant consequences would be averted. He (Mr. Smith) had only met with two cases in which anything like severe effects were produced: in one, great pain and distress were caused by a too free application; in the other, a great deal of hæmorrhage followed. But these might be easily avoided by a careful method of applying the acid. In conclusion, the author mentioned several illustrative cases.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

TWENTY-EIGHTH ANNUAL MEETING.

[*Held in Leeds, Sept. 22nd, and following days*, 1858.]

[*Continued from page* 894.]

SECTION OF MATHEMATICAL AND PHYSICAL SCIENCE.

ON VISION THROUGH THE FORAMEN CENTRALE OF THE RETINA. BY SIR D. BREWSTER.

At the meeting of the British Association which was held at Belfast, Sir D. Brewster gave an account of a case of vision, in which it was performed entirely by the choroid coat, and through the foramen centrale of the retina. The space of distinct vision as ascertained by the number of minute printed letters which the patient could read was 4½°, the angle subtended by the foramen, which he had previously determined by experiment. In this case the paralysis of the retina was permanent, and the patient was blind, with the exception of the small amount of vision which he enjoyed through the foramen. In the case to which he now called attention, paralysis was temporary, and was accompanied with severe headaches; but as soon as the patient recovered her health, the retina resumed its usual functions. In order to find the area of distinct vision, the patient observed with care the number of small and sharply printed letters which she could read at a certain distance from the eye; and upon measuring the breadth of these letters, and their distance from the eye, Sir D. Brewster found that they subtended an angle of 4½°, corresponding with the size of the opening in the retina. These facts, when viewed in connexion with those which he described at the Swansea Meeting, might throw some light on the functions exercised by the retina as a whole, or by some of its individual layers. He had placed it beyond a doubt that the membrane, whether choroid or retina, which occupied an area of 4½° at the extremity of the optical axis of the eye, was, in certain cases, *less retentive* of luminous impression, and, in others, *more retentive* than the retina. If the microscope proved that there was no retina corresponding to that area, we must consider the choroid coat as the seat of vision. If it should prove that any one of the layers of the retina occupies that area, while the rest are wanting, it would be manifest that that layer is the seat of vision, or rather of luminous impressions.

Mr. Nunneley had just read a paper in another section, in which his object was to show that it was a mistake, arising from dissecting the eye after decomposition had commenced, to suppose there was a foramen or hole in the retina of man, of certain kinds of monkeys, and of lizards in the direction of the optic axis. He believed it to be a mistake; he had dissected the eyes of fresh subjects soon after death without finding any trace of it. Besides, he could not conceive that all other animals, who confessedly had not this foramen, were without the power of distinct vision.

Sir D. Brewster was not an anatomist, and was therefore unable to enter into a discussion with Mr. Nunneley, whose views and opinions he admitted were entitled to the most careful consideration. But Sir Everard Home had been the first to detect this foramen, and other anatomists of the greatest eminence had after him admitted its existence. Sömmering had figured and given its dimensions,—and as to the recency of the subject, one case in which it had been found was the eye of a criminal who had been executed in Edinburgh in the prime and vigour of manhood and of health, and the examina-

tion of his eye had taken place within two hours of his death, so that no more favourable case could be conceived. But to waive the anatomical question, he (Sir D. Brewster) had felt convinced that the structure of the eye about the optic axis in a sphere embracing a circle of 4½° was physically distinguished from the rest of the coats in the eye by characters which could not be mistaken,—of which he had given several at the Swansea and Belfast Meetings of the Association, and which he now briefly recapitulated.

DURATION OF LUMINOUS IMPRESSIONS ON CERTAIN POINTS OF THE RETINA. BY SIR D. BREWSTER.

It was well known that the duration of luminous impressions on the retina is one-third of a second for white light of ordinary intensity. In the report of the Belfast Meeting, Sir D. Brewster had shown that the small circular area at the end of the axis, whether it be retina or choroid, retained light longer than the general retina, after the eye had been exposed to light; and he had recently observed that certain points of that membrane, situated apparently near its termination at the ciliary processes, had even a greater retentive power. In order to observe this curious phenomenon, we must extinguish, suddenly, a gas-flame to the light of which the eye has been for some time exposed. We shall then observe a number of bright luminous points arranged in a circle, the diameter of which is about 72°. These bright points, or stars, apparently placed at equal distances, vanish so quickly that he had found it very difficult to determine their number. They may amount to 15 or 20. He had sometimes observed them upon extinguishing a candle, and also upon quickly shutting the eyes. The parts of the retina from which these points of light emanate are probably places where the retina is attached to the ciliary ring, or other parts in the interior of the eye, and may therefore be detected by the anatomist.

SECTION OF PHYSIOLOGY.

EFFECT PRODUCED IN REPTILES BY STRYCHNIA, FAVOURABLE FOR OBSERVATIONS ON THEIR CIRCULATION. BY G. MORLEY, ESQ.

Mr. MORLEY exhibited a frog in a rigid state from strychnia, and one which had passed from that to apparent death; and then pointed out that in the animal which had apparently expired pulsation and circulation were going on more rapidly than in the one in a state of rigidity. He had thought the animal dead in the early experiments, but from the free hæmorrhage discovered that it was not; and this at once led him to see the importance of the discovery in making observations on the circulation.

Editor's Letter Box.

MEDICAL BENEVOLENT COLLEGE.

LETTER FROM W. ALLISON, ESQ.

SIR,—Having requested Mr. Daniell to refresh my memory, it appears from his reply that Mr. Martin first projected his scheme, and Mr. Daniell next originated a design for a second undertaking; and that these gentlemen converged their courses towards the formation of a junction with a London committee, whence was to proceed a broad way towards the accomplishment of a great enterprise.

Although I never spoke to or even saw either Mr. Martin or Mr. Daniell, I will be answerable for the publication of the subjoined letter of information to myself, if inserted in the Journal; and in case the profession combine to present a piece of plate with a suitable inscription to both Mr. Martin and Mr. Daniell, I shall, I think, see Mr. Propert's name as a subscriber for both testimonials.

I am, etc., W. ALLISON.

Retford, November 1st, 1858.

N.B. Mr. Daniell could furnish you with printed pamphlets, etc., because he has sent some to me.

[The following is Mr. Daniell's letter referred to by Mr. Allison.]

"Newport Pagnell, Nov. 30th, 1858.

"MY DEAR SIR,—Your letter in the JOURNAL of to-day, in which you kindly refer to the labours of Mr. Martin in his efforts to establish schools for the sons of medical men, and for the education of orphan children of deceased members of the profession; and to my own exertions in endeavouring to form an institution for the relief of decayed members, widows, and orphans; and also to the failure of those two important projects, induces me to give you a little history. You will therefrom see how far the scheme of the Benevolent College is indebted to the labours of its predecessors.

"In 1844, at the meeting of the Provincial Medical and Surgical Association, held at Northampton, Mr. Martin proposed his scheme for the establishment of a school or schools, in order to secure to the sons of medical men a sound education on reasonable terms, with a provision to educate gratuitously the orphan children of deceased members. The scheme was warmly received. I had the honour to be a member of the committee. My friend, Mr. Martin, carried out his plan vigorously for a length of time; meeting in London very often the members of the committee, with Dr. (now Sir John) Forbes, as chairman. The scheme failed for want of support: something like £1,700, I believe, was subscribed and promised; but Mr. Martin objected to commence the school with less than £10,000. The College plan is analogous to the project of Mr. Martin, with this difference; that (if I recollect rightly) Mr. Martin had calculated that £30 a-year should be the *maximum* of expense to an exhibitioner.

"I have sent you a series of pamphlets, which will at once show the nature of my project. The design, I confess, was gigantic, but nevertheless quite practical; and of its value, when once firmly established, I *now* entertain no doubt whatever. One large institution is as easily managed with sufficient hands, and often more efficiently than a small one. You will perceive that my intention was to form a self-supporting society—one which should not be strictly charitable, although charitable donations were not forbidden. The rich were supposed to help the poor; and the latter, if compelled to seek its aid, might do so without feeling the reproach of accepting an unmerited gift, but claiming as a right, that for which they had subscribed.

"For four years did I labour alone in carrying on this project; and my correspondence during that period was so terrific, and the demands upon my time so absorbing, that my health suffered by the labour, and I was compelled to place the institution in the hands of a committee in London. You will find in one of the pamphlets which I send you the particulars of that meeting, held in Hanover Square Rooms, together with the address which I delivered on that occasion, in which is embodied my reasons for delegating my powers to others, and my hopes for the wellbeing of my infant institution. When I last addressed the meeting of subscribers in London, I felt certain that nothing could hinder the final establishment of 'The British Medical Fund'; for nearly all the *élite* of the profession in London were lending it a helping hand; and with this conviction on my mind, I finished my remarks with a paragraph nearly in the following words.

"'You must not regard the establishment of the British Medical Fund as all and everything we need in the profession. In the language of a great statesman, I will say, it is not a final measure. I look for the establishment of my revered friend Mr. Martin's plan for the education of the sons of medical men as an essential adjunct; and to the suggestion of Mr. Smith of Southam, for building homes for widows, as worthy our serious consideration. I feel a reproach in passing King's Langley, that the booksellers should found a retreat for their decayed members, while the medical profession are so apathetic as to be without one.'

"Mr. Propert was present when these remarks were made, and was warmly eulogistic on the whole matter of this speech.

"Now with respect to the merits of Mr. Propert, no man is more ready than I am to award them fully and freely. I have done so publicly, and I will do so again; for I am certain if I had put forth his scheme, I could never have carried it out, and I believe firmly no other man could. He is worthy of all praise; and if a proposition were on foot to present him a solid testimonial, which could descend to his children's children, I would not withhold my mite, that those children in generations yet to come might be told,—'It was the gift of a grateful people for worthy deeds, and an example to stimulate them to go and do likewise.'

"If there be any merit in my endeavours, I have long given myself credit for it. During my four years labour, I made the medical press teem with appeals, and pointed out, in the most forcible language my powers enabled me to use, the wants of the profession, the claims of the widows, and the cries of the orphan; and I have not a doubt in my mind but these "appeals" did rouse the feeling of the medical world, and made the members of the profession more alive than they would have

been to the project of Mr. Propert, and insured in no small degree the success which has followed his labours.

"I am, my dear Sir, yours truly,

"Edw. Daniell.

"To W. Allison, Esq."

URETHROTOMY.

Letter from F. Gourlay, M.D.

Sir,—My attention has been directed to the following statement by Mr. Henry Smith in the *Medical Times and Gazette* of August 21st: "In order to show that, by taking a number of cases, the results of this operation are anything but favourable in the hands even of the most skilful, I may mention that there have been operated upon in the King's College Hospital, by Mr. Fergusson, since 1849, thirteen cases of stricture according to the new method; out of these cases, three patients have died; and, of the ten remaining, about one-half only have been turned out in what may be termed a sound condition."

With reference to this statement, I beg to give the results of the same number of cases most recently treated in the Royal Infirmary of Edinburgh by Mr. Syme. By the expression "cured", I wish it to be understood that the wound was healed, that the urine passed entirely by its natural channel, and that instruments of the full size could be passed with ease into the bladder.

No.	Name and age.	Residence.	Admission.	Operation.	Result.
1	A. E., 56	Edinburgh	March 5	March 29	Cured, April 27.
2	J. C., 43	Leith	March 19	April 12	Cured, May 20.
3	T. H., 47	Alnwick	April 4	April 15	Cured, May 18.
4	H. J., 28	Leith	April 29	May 3	Cured, June 5.
5	H. McG., 38	North Shields	April 19	May 6 } June 7 }	Cured, Aug. 14.
6	J. W., 51	Lasswade	April 19	May 10	Cured, June 14.
7	D. H., 32	Edinburgh	May 22	May 31	Cured, June 14.
8	C. C., 34	Liberton	June 8	June 17	Cured, July 19.
9	G. T., 21	Halifax	June 10	June 30	Cured, July 25.
10	E. D., 40	Hamilton	June 18	July 6	Cured, Aug. 23.
11	G. W., 50	Glasgow	Sept. 14	Sept. 16	Cured, Oct. 15.
12	J. B., 43	Airdrie	Sept. 15	Sept. 29	Cured, Oct. 20.
13	J. McJ., 54	Killin	Sept. 27	Sept. 29	Cured, Oct. 28.

I am, etc., Frederick Gourlay, M.D.,
Resident Surgeon, Clinical Surgical Wards.

Royal Infirmary, Edinburgh, October 30th, 1858.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Bealey. On November 2nd, at 27, Tavistock Square, the wife of Adam Bealey, M.D., of twin daughters.

Butler. On October 28th, at Winchester, the wife of Frederick J. Butler, Esq., of a daughter.

Cock. On November 1st, at 1, Westbourne Park Terrace, Porchester Square, the wife of Frederick Cock, M.D., of a son.

Colborne. On October 29th, at Chippenham, the wife of W. H. Colborne, M.D., of a son.

Colebrooke. On October 29th, at Southborough, Tunbridge Wells, the wife of *Henry Colebrooke, M.D., of a son.

Combs. On October 27th, at Burwash, Sussex, the wife of J. W. Combs, Esq., Surgeon, of a daughter.

Hemming. On October 26th, at Abingdon, the wife of C. Hemming, M.D., of a daughter.

Phillipson. On October 27th, at Wynnstead, St. Mary Church, Devon, the wife of R. Phillipson, Esq., late Bengal Medical Service, of a daughter.

Sturt. On October 27th, at 57, Margaret Street, Cavendish Square, the wife of T. J. Sturt, M.D., of a son.

Van der Byl. On October 28th, at 1, Oxford Square, the wife of Philip J. Van der Byl, M.D., of a daughter.

Young. On November 1st, at Yarm, Yorkshire, the wife of Christopher Young, M.D., of a daughter.

MARRIAGES.

Bentley—Muloch. Bentley, Mark Cumberland, Esq., of Corrig House, Kingstown, Ireland, to Anna Maria, eldest daughter of Robert Muloch, M.D., of Dublin and Kingstown, at Monkstown Church, on October 13th.

Dixon—Diggles. Dixon, Thomas, M.D., to Eliza, only daughter of Robert Diggles, Esq., of Woodlands, Cheshunt, on October 28th.

Heelis—Reeve. Heelis, Robert, jun., Esq., Surgeon, of Parkfield Villas, Hampstead, to Basina Coleman, eldest daughter of L. Reeve, Esq., of the Hermitage, Peasemarsh, Sussex, on October 21st

Pennell—Mist. Pennell, George Brice, Esq., second son of R. L. Pennell, M.D., of Venbridge, Devon, to Mary, only daughter of the late Thomas Mist, Esq., Bradford, Somerset, at St. Peter's Church, Melbourne, Australia, on July 17th.

Roberts—Cobb. Roberts, Charles West, Esq., Surgeon, of Ely Place, Holborn, to Eliza Mary, eldest daughter of Thos. Cobb, Esq., of New Romsey, on October 20th.

Spender—Headland. *Spender, John Kent, Esq., Surgeon, of Bath, to Eliza, second daughter of Edward Headland, Esq., of Upper Portland Place, at St. Marylebone Church, on October 28th.

DEATHS.

Campbell, Colin, Esq., late Physician-General in Bengal, at Brighton, aged 80, on November 1st.

Cannon. On September 15th, on his way down the Ganges, on sick leave, Captain Edward Cannon, 17th Madras Native Infantry, Brigade-Major at Cawnpore, youngest son of *Æneas Cannon, M.D., of Cheltenham, aged 34.

Freer. On October 29th, Ellen Lucy, youngest daughter f John Booth Freer, M.D., of Brentford, aged 22.

Gregory, Samuel, Esq., late Surgeon to the Sheffield Royal Infirmary, at Brighton, aged 55, on October 29th.

Jackson. On October 23rd, at Reading, of consumption, aged 20, Sarah, daughter of the late William Jackson, Esq., Surgeon, High Wycombe.

*Woodward, John, Esq., Surgeon, of Manchester, suddenly, lately.

[The Dr. Watson of Bath, whose decease was announced in the obituary of the British Medical Journal for September 4th, was a retired military officer; and not Dr. Watson who has been for many years, and is still, in practice as physician in that city.]

APPOINTMENTS.

Cock, Frederick, M.D., elected Physician to the Western General Dispensary.

Richardson, Benjamin Wills, Esq., elected Surgeon to the Adelaide Hospital, Dublin.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday October 14th, 1858:—

Clark, Samuel, Forfarshire

Thursday, October 21st:—

Emmerson, Charles, Sandwich, Kent
Hailey, Ebenezer, Manchester
M'Ewen, John, Piccadilly, Manchester
Nicholson, Joseph Metcalf, New Wortle, near Leeds
Pearce, George
Richards, Richard, Harlech, North Wales

Also eight gentlemen who passed their first examination.

Thursday, October 28th:—

Broomhead, George, Saxelby, Lincoln

DUKE, Allen Abraham, Chichester, Sussex
FOSTER, John Frederick, Hartley Wintney, Hants
GARNER, John, Birmingham
In addition, five gentlemen passed their first examination.

UNIVERSITY OF ST. ANDREW'S. List of gentlemen on whom the Degree of Doctor of Medicine was conferred on October 22nd, 1858:—

ADDISON, George, M.R.C.S. and L.A.C., Uxbridge
ASHURST, William Robert, M.R.C.S., Farningham
BARKER, Alfred James, M.R.C.S., Upper Holloway
BARKER, Samuel, M.R.C.S. and L.A.C., London
BUSS, Henry, M.R.C.S. and L.A.C., London
CAREY, Francis Edward, M.R.C.S. and L.A.C., Guernsey
CONSTANT, Fredk. George, M.R.C.S. and L.A.C., Ramsgate, Kent
CROUCHER, Alex. Richard, M.R.C.S. and L.A.C., London
DAVIES, William Broughton, M.R.C.S., Wellington, Sierra Leone
DAY, Henry, M.R.C.S., Stafford
DIVER, Thomas, L.A.C., Hampstead, London
FLETCHER, Jas. Ogdon, M.R.C.S. and L.A.C., Manchester
GIRDLESTONE, Chas., M.R.C.S. and L.A.C., Downton, Wilts
GIRDLESTONE, Horatio, M.R.C.S. and L.A.C., Wangford, Suffolk
HOLDEN, George, M.R.C.S., Australia
HOUSLEY, John, M.R.C.S., Mansfield-Woodhouse, Notts
HUTCHESON, Robt. William, M.R.C.S., West Indies
JEPSON, Octavius, M.R.C.S. and L.A.C., Gainsborough, Lincolnshire
KING, Thomas Kirwan, M.R.C.S., Camberwell, London
LEY, Edwin Granville, M.R.C.S. and L.A.C., Rochester, Kent
MOLINEAUX, Jas., M.R.C.S. and L.A.C., Manchester
NIHILL, John, M.R.C.S.I., R.N., Lewisham, Kent
PAGE, Frederick, F.R.C.S., Cambridge
PUREFOY, Jas. Robert, M.R.C.S.I., co. Dublin
ROBINSON, Thomas, M.R.C.S. and L.A.C., London
SEWARD, Thomas, M.R.C.S. and L.A.C., London
SHILL, Thomas, London
SMALLMAN, Joseph Clement B., M.R.C.S., London
STILWELL, Robt. Ratheram, M.R.C.S. and L.A.C., Epsom, Surrey
TARDY, Elias Napoleon, M.R.C.S., Trinidad, West Indies
TATE, Robert, M.R.C.S.I., Manor Hamilton, co. Leitrim
TROTTER, David, M.R.C.S.I., co. Meath
WATSON, Henry, M.R.C.S. and L.A.C., Loughborough, Leicester
WILLIAMS, David William, M.R.C.S., Llandudno, N. Wales

HEALTH OF LONDON:—WEEK ENDING OCTOBER 30TH, 1858.

[From the Registrar-General's Report.]

THE deaths from all causes registered in London in the week ending Saturday, October 30th, were 1133, and they exhibit an increase, though it is not considerable, on those of the previous week. In the ten years 1848-57, the average number of deaths in the weeks corresponding with last week was 1020; but as the deaths of last week occurred in a population which has increased, they can only be compared with the average when the latter has been raised proportionally to the increase, a correction by which it will become 1122. Hence it appears that the rate of mortality now prevailing is but slightly in excess of that which is deduced from former experience at the end of October. The Greenwich meteorology for the week shows that, though the mean temperature of the air fell considerably on the last two days, it was altogether neither higher nor lower than the average of a long series of corresponding weeks.

If the mortality shown in the present return had been according to the rate which has been obtained for the autumnal months in certain selected districts of England, the deaths would not have exceeded 770; and the actual excess, or 363, must be referred, as the result of a week, to those conditions of insalubrity that still exist in large town populations.

Scarlatina has maintained a high mortality throughout October. The deaths from it last week were the same in number as those of the previous week, namely, 156; the corrected average of ten corresponding weeks is 77; and the only week within this series in which scarlatina was more fatal, was that of 1848, when the deaths rose to 182. Last week it was fatal in 11 cases in Westminster; a like number in Marylebone; 16 in Pancras; 12 in Islington; 8 in Poplar; 9 in Newington; 11 in Lambeth. It may be added, that no cases are recorded in the districts of St. George (Hanover Square), St. Martin-in-the-Fields, St. James, Westminster, St. Giles, St. Luke, or London City.

Mr. Goodhugh, the Registrar of St. George-the-Martyr, Holborn, remarks that scarlatina has been very prevalent among children in his sub-district lately, and the mortality has been higher than it was for some time previously. Last week he registered 19 deaths from all causes (nearly one to a thousand of the population): and 17 of these were deaths of children, six of whom died of scarlatina.

It will be seen in the tables that five persons died from delirium tremens, and the deaths of six others are expressly referred to intemperance. The weekly average of deaths under these two heads is not so formidable, it is three; and no cases occurred in the previous week.

Last week, the births of 909 boys and 871 girls, in all 1780 children, were registered in London. In the ten corresponding weeks of the years 1848-57, the average number was 1527.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·118 in. The mean daily reading was above 30 in. on five days; the highest reading was 30.45 in., on Saturday. The mean temperature of the week was 47·2°, which is the same as the average for the same week in 43 years (as determined by Mr. Glaisher). The highest reading of the thermometer in the shade was 57·8°, on Monday; the lowest 33°, on Saturday. The whole range of the week was therefore 24.8°. The mean daily range was 12.5°. The range on Sunday was only 5.2°. The difference between the mean dew-point temperature and air temperature was 3.9°. The mean degree of humidity of the air was 88. The mean temperature of the water of the Thames was 55.3°, or 8° higher than that of the air. The direction of the wind was almost always north-east. The rain-fall was 0.24 in.

BANQUET TO J. CORDY BURROWS, ESQ., MAYOR OF BRIGHTON.

ON Thursday, October 21st, his Worship the Mayor of Brighton, Mr. J. Cordy Burrows, accepted the invitation of forty-two of his professional brethren to a banquet, in order "that they might express their personal esteem for him, and acknowledge the dignified and hospitable manner in which he has upheld the honour of the profession, while ably discharging the duties of Mayor of the Borough." The chair was occupied by E. J. Furner, Esq., Senior Surgeon to the Sussex County Hospital, and the vice-chairs by Dr. King, Physician to the Hospital, and Dr. Bryce. After the customary toasts,

The CHAIRMAN proposed the health of "His Worship the Mayor of Brighton, Cordy Burrows, Esq." He had had the pleasure of knowing Mr. Burrows twenty years, and his conduct as a medical man during the whole of that time had won for him the esteem and affection of all the medical men of the town. This fact was sufficiently shown by the presence of the largest body of gentlemen of that profession who had ever before sat down at an assemblage of this description in Brighton. The Chairman proceeded to speak of the position which Mr. Burrows occupied in the town, apart from his professional position, and specified particularly some of the public services to which he owed it. Among other points referred to was that of the part he had taken in reference to the improvements on the Steine; his being one of the promoters of the Albion Rooms Literary Institution, from which had sprung other kindred institutions of advantage to the town; his endeavours to promote local reforms, and his discharge of public duties under the Municipal Charter; lastly, his sustaining the office of Mayor, in which he had upheld the dignity of the Mayoralty and advanced the credit of the profession in the eyes of the public. Special mention was made of the manner in which the Mayor presided on the occasion of the visit of the South-Eastern Branch of the Medical Association to Brighton.

The toast was honoured with the greatest enthusiasm.

The MAYOR, in responding, said no man could stand before so large a body of his brother medical men, who had met to do him honour, without feelings of the deepest emotion. As Mr. Furner had remarked, he had been in practice in the town for upwards of twenty years; and during that time it had been his constant endeavour so to comport himself as to win the respect and esteem especially of his brother medical men. Had circumstances occurred such as would have placed at his disposal or enabled him to fill any office in the town in connection with our public medical charities, the energies which every one knew

he possessed would in all probability have been exerted in a different channel. But the course of events took another direction, and, with energies irrepressible, and an earnest desire to promote the healthfulness of the town, he entered the arena of local politics. His doing so originated distinctly in his anxiety to bring about sanitary improvements in the town; and that he had not been so successful in that direction as he could have wished was no fault of his, and he trusted that affairs had so far progressed that at any rate they were in a fair way of seeing improvements carried out which would be highly advantageous, and tend to promote the best interests of the town of Brighton. It was to him a source of honest pride that he should have merited the esteem and affection of so large a body of medical men. He could only say that it would be his earnest endeavour to continue to deserve the high encomiums which had been passed on him, by using every exertion to promote the happiness and prosperity of those among whom he lived. Refreshingly grateful as had been the magnificent banquet to which he had been invited, it had not been so refreshing, so grateful, as the esteem of his fellow-townsmen, and infinitely less so than the love and esteem of so large a body of the members of a profession, the most honourable and useful of all professions, to which he felt it—as he trusted his son might also feel it—a privilege to belong. [*Cheers.*]

The other toasts of the evening were,—"The Chairman," given by Mr. Burrows; "The Medical Charities of Brighton," given by Mr. Oldham, and acknowledged by Mr. Lawrence; "The Vice-Chairmen," by Mr. H. Blaker, responded to by Dr. King; "The Committee and Dr. Bryce," by Mr. Hollis, acknowledged by Dr. Bryce; "The Medico-Chirurgical Society," by Mr. Tatham, acknowledged by Mr. Lowdell; and "The Ladies and Mrs. Burrows," given by Dr. Carter.

During the evening, the members of the Brighton Vocal Union, assisted by Miss Strong, sang a number of glees and part-songs.

CARNARVONSHIRE MEDICAL REGISTRATION ASSOCIATION.

The following resolutions were passed at a meeting of legally qualified members of the medical profession, held in Carnarvon, on October 29th, 1858.

1. That it is expedient to form an association of duly qualified medical men, practising in Carnarvon and Carnarvonshire, to assist the registrar to carry out the provisions of the new Medical Act.

2. That a subscription of two shillings and sixpence be entered into to defray the necessary expenses of the Carnarvonshire Medical Registration Association.

3. That a Committee be formed to carry out the objects of this association, and to call a general meeting of members whenever it may be considered necessary.

4. That the following be members of the Committee, with power to add to their number:—Robert Jones, Esq. (Carnarvon); Dr. Wynn Williams (Carnarvon); W. Rumsey Williams, Esq., sen. (Carnarvon); W. Rumsey Williams, Esq., jun. (Carnarvon); Dr. W. Maugham (Carnarvon); Morris Davies, Esq. (Carnarvon); Dr. Charles Millar (Carnarvon); Hugh Hunter Hughes, Esq. (Pwllheli); Robert Roberts, Esq. (Port Madoc); H. R. Hughes, Esq. (Bangor); Dr. James Edwards (Benarth, Conway); Hamilton A. Roberts, Esq. (Bethesda); Thomas Clarke Roden, Esq. (Llandudno).

5. That the following resolutions be forwarded to the medical journals.

6. That the thanks of the meeting be given to the Chairman, Robert Jones, Esq., of Carnarvon.

W. Maugham, M.D., *Secretary and Treasurer.*

Royal College of Surgeons of Edinburgh. At a meeting of the College on October 20th, the following office-bearers were elected for the ensuing year:—*President*—Robert Omond. *Treasurer*—John Gairdner. *Librarian*—Archibald Inglis. *Secretary*—John Scott, W.S. *President's Council*—James S. Combe, James Simson, Andrew Wood, Douglas Maclagan, Benjamin Bell, James Dunsmure. *Examiners*—John Gairdner, James Simson, Richard Huie, William Dumbreck, Archibald Inglis, Andrew Wood, Pat. S. K. Newbigging, Benjamin Bell, James Dunsmure, Douglas Maclagan, John Struthers, James Spence. *Inspector of Students' Course of Study*—James Simson. *Assessors to Examiners.*—David Maclagan, James S. Combe, James Syme, Samuel A. Pagan. *Conservator of Museum*—William R. Sanders, M.D. *Officer*—John Dickie.

The Climate of the Cape of Good Hope. The natural features of the Cape colony are such as to insure for it a healthy climate. Stretching northwards from the extensive port of the Cape, the country is formed into a succession of mountain terraces, lying across the country from east to west, each terrace rising above the other to a considerable height, till the highest mountain ranges attain the height of about 10,000 feet above the level of the sea. The Cape colony is thus most happily provided with sea breezes over a large portion of the country; for upon the west, south, and north its shores are washed by the Atlantic and Indian Oceans, while in the interior the heat is mitigated by the cooling winds which pass from the mountain ranges over the plains and valleys. The consequence is a moderate and equable temperature, the coldest which has been noted being about 57 and the hottest about 79 degrees, the mean temperature deduced from observations made over several years at Cape Town giving a result of about 67 degrees Fahrenheit, or about the same as Malta or Sydney, the capital of New South Wales, and three degrees above the mean of Madeira, Gibralter, and Algiers. Additional evidence of the remarkably healthy character of the Cape is afforded by the fact that it is a place of resort, a sanatorium, in fact, for the officers of the Indian army, who, when affected by disease incident to the tropical climate of India, find that the salubrious and invigorating breezes of the Cape have an excellent restorative effect. This peculiar healthiness of the Cape requires only to be more generally known in this country to make it preferred to the island Madeira, Algiers, or other parts to which invalids from this country generally resort for the benefit of a change of climate. Many persons would, we are confident, select this fine British colony in preference to countries which are under foreign government. At the Cape of Good Hope the sufferer will find himself among his own countrymen, and would receive a degree of sympathy and assistance which he could not expect among foreigners, and would not be exposed to the annoyance of living in a state of society to which he has not been accustomed, and to an irritating system of government as strange as it is unacceptable to the invalid from a country where no such system is known. The opinion of Mr. Maclear, after many years observation, is, that upon the whole the climate approaches closely to that of Madeira, the only difference being that the winds are stronger and more regular at the Cape than at the latter place. (*Cape and Natal News.*)

The Medical Act: Registration. At the third annual meeting of the Salopian Medico-Ethical Society (numbering upwards of ninety members), held in the Music Hall, Shrewsbury, on Friday, October 29th—the President, Richard Thursfield, Esq., in the chair,—the following resolution was unanimously adopted:—"That the Council be requested, and are hereby empowered, to take such steps as they may deem necessary and judicious for the purpose of assisting the Registrar in carrying out the provisions of the new Medical Act in the counties of Salop and Montgomery; and, with the view of protecting the just professional rights of the legally qualified practitioners resident therein, that the Council be further authorised to institute, *in the name of the Society*, such proceedings against unqualified persons practising in the counties aforesaid, as the solicitor of the Association may advise; and that a special subscription of five shillings (in contradistinction to the current annual amount specified in the fourth general law) be entered into for defraying the attendant expenses, and that the sum so collected be called 'The Registration and Protective Fund'."

The Bréant Prize. It will be remembered that the late Mr. Bréant left a reward of £4,000 to the discoverer of an undoubted remedy for, or prophylactic of, cholera. The Academy of Sciences, Paris, which has the supervision of the subject, has lately reviewed the report of the committee appointed to examine the claims of candidates. None of the one hundred and fifty-three essays which were submitted were thought worthy of the prize; but two attracted some attention. The head surgeon of the Smolensk Hospital, Russia, thinking cholera analogous to small-pox and typhoid fever, vaccinates all the patients at the onset of the epidemic. This mode, he claims, saves six out of seven patients. The other writer, who signs himself Mr. R., says that his cures are eighty per cent., and that he uses calomel in two or three-grain doses every two or five minutes, there being no danger of salivation. (*North American Medico-Chirurgical Review.* September, 1858.)

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

Communications have been received from:—MR. W. ALLISON; DR. JOHN STRUTHERS; DR. W. MAUGHAM; MR. DULVEY; DR. WOODFALL; DR. F. J. BROWN; DR. T. WATSON; MR. T. HOLMES; DR. INMAN; MR. J. R. HUMPHREYS; DR. BRYDEN; DR. H. LL. WILLIAMS; MR. T. F. EDWARDS; DR. JAMES ARNOTT; MR. P. H. HARPER; DR. G. E. DAY; MR. ERICHSEN; DR. STYRAP; MR. DULLEY; and MR. STONE.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Principles and Practice of Operative Surgery. By Frederick C. Skey, F.R.S. Second Edition. London: Longmans. 1858.
2. An Introduction to Clinical Surgery: with a Method of Investigating and Reporting Surgical Cases. By Furneaux Jordan. London: Churchill. 1858.
3. Observations on Diphtheritis. By *Willoughby F. Wade, B.A., M.B. T.C.D. London: Churchill. 1858.
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